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Dispelling the myths of Liability Driven Investing

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What we aim to cover

- What is Liability Driven Investing (LDI)?
- Dispelling the LDI myths for Irish Pension Schemes
- Time to think differently?

Have you considered LDI yet?

1) No
2) Yes – Received training but not progressed further
3) Yes – Strategic LDI discussions ongoing
4) Yes – Appointed LDI manager
5) Yes – Implemented LDI

Answered 1 or 2 to the previous question? What is the reason for not progressing further?

1) Current interest rates are too low
2) We don’t want to sell our growth assets
3) Not relevant for Irish Pension Schemes
4) There are too many risks involved
5) Other

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What is Liability Driven Investing - LDI?

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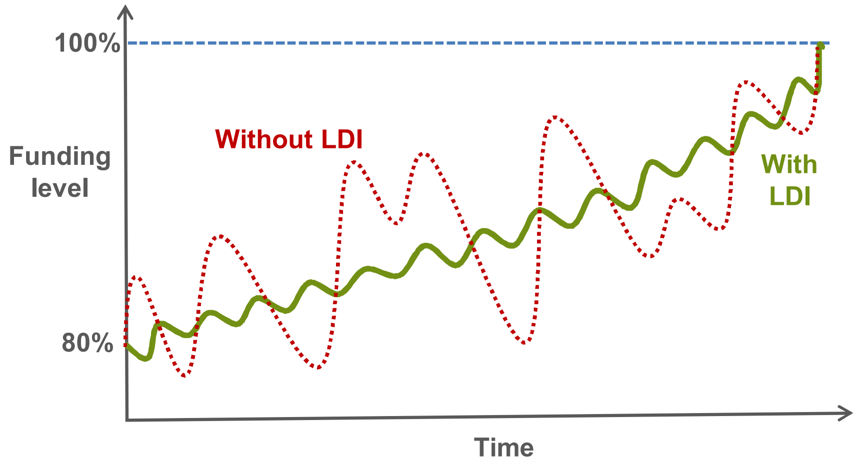
What does an LDI strategy seek to achieve?

- **Reduce** funding level **volatility**
- **Without reducing** allocation to growth assets/ **expected return**



Source: AXA IM – For illustrative purposes only

What risks are schemes taking by not including LDI?

Example Scheme

- **Assets:** €100m (bonds € 50m)
- **Liabilities:** € 125m
- **Bond duration:** 12.5 years
- **Liability duration:** 20 years

Bonds hedging c.25% of liability interest rate risk*
Bonds hedging 0% of liability inflation risk**

Source: AXA IM. * 50m x 12.5years / (125 x 20 years) ** Assuming no allocation to inflation linked bonds

Dispelling the LDI myths for Irish Pension Schemes

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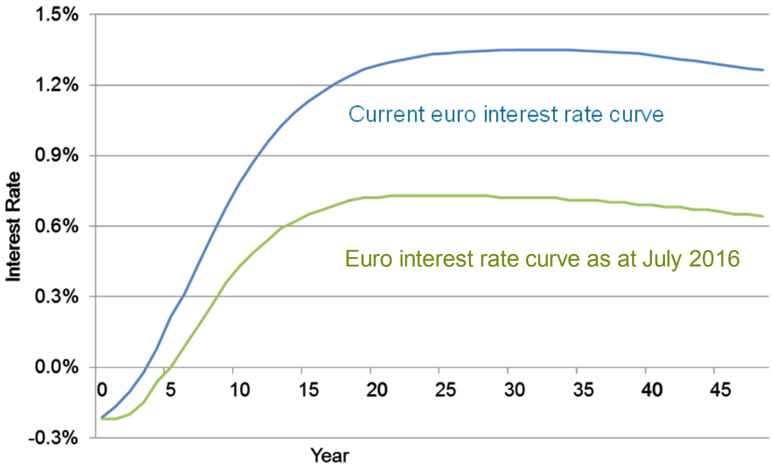
Myth 1: LDI doesn't make sense with low current interest rates



- The euro base interest rate is expected to rise
- An LDI interest rate hedge only loses money if rates rise faster or further than predicted
- Market implied interest rates have increased since July 2016

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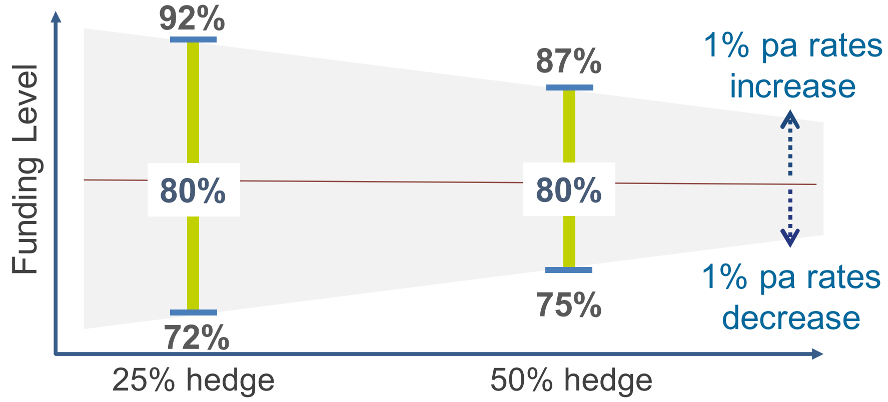
Source: Bloomberg, AXA IM Apollo as at 28/02/2017 and 29/07/2016

Consider phasing in low yield environment



If hedge increased to <100% still benefit from rising rates but better protected from lower rates

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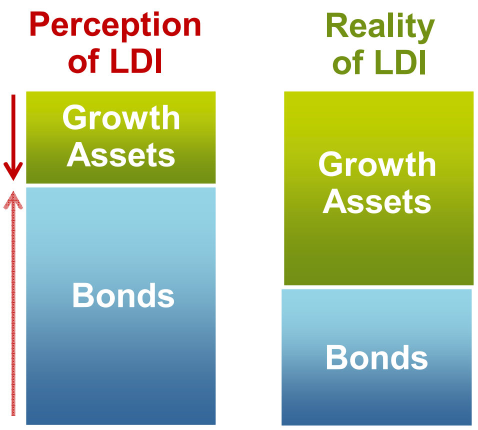
Source: AXA IM for illustration purposes only

Myth 2: LDI means switching equities to bonds



Improve hedging without selling growth assets by:

- Extending duration of existing bonds
- Increased use of inflation linked bonds
- Transfer existing bonds to LDI manager to allow use of a range of LDI instruments

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Source: AXA IM – For illustrative purposes only

Myth 3: LDI is less relevant for Irish schemes

Some imperfections but better than doing nothing…

- There are some additional challenges for Irish schemes
  - Lack of bonds linked to Irish inflation
  - Interaction with statutory funding standard
- Better liability matching should reduce risk reserve
- Whilst not perfect it is possible to substantially reduce risk

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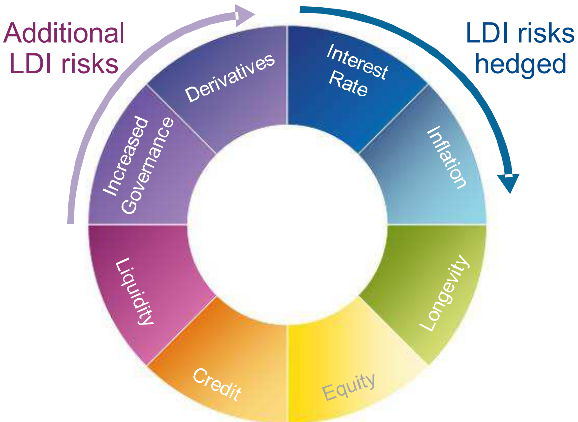
Source: AXA IM – For illustrative purposes only

Myth 4: It's too risky to implement LDI

Pension scheme risks



- Complexity reduced
  - Training (consultant/manager)
  - Appropriate reporting
- Risks Managed
  - Counterparty - diversification and collateral
  - Operational - documentation and robust platform

If you hold bonds you are already partially 'doing LDI'

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Source: AXA IM – For illustrative purposes only

Time to think differently?

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Time to think differently about LDI for your scheme?

- LDI is a strategy seeking to **reduce funding level volatility**
- This **can be implemented for Irish schemes**:
  - When headline interest rates are low
  - Without reducing growth asset allocation
  - With regard to each scheme's own liabilities and funding basis
- The **additional risks of LDI can be managed by**:
  - Training
  - Joined up reporting from consultant and investment manager
  - Managing the key risks – counterparty and operational

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Will you now consider adding LDI to your toolkit?

1) Yes
2) No
3) Maybe

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