Do we need to manage liabilities?

LAPF Strategic Investment Forum
9 February 2012

Paul Sweeting, European Head, Strategy

☎ +44 (0) 20 7742 0501

✉ paul.j.sweeting@jpmorgan.com

J.P.Morgan
Asset Management

Points to cover

- What is LDI?
- Is LDI a good idea generally?
- Is LDI a good idea for local authorities?

What is LDI?

J.P.Morgan
Asset Management

A definition of liability driven investment

- The development of a strategic asset allocation strategy…
- …with explicit recognition of the nature of the liabilities…
- …in particular the extent to which they are sensitive to changes in interest rates

How do interest rates affect solvency?

- Big picture
  - The value of liabilities is calculated by discounting cash flows using the appropriate discount rate
  - As discount rates fall, liabilities rise
  - The longer the duration of the liabilities, the bigger the rise in liabilities for a given fall in rates (at all terms)
  - To the extent that this interest rate risk is not hedged (too few/too short bonds), this will adversely affect solvency
- Digging a little deeper
  - The present value of cash flows reflects the amount required now that will accumulate to the liability at current rates
  - If rates fall, the amount required now increases since less interest will be received
  - If the assets have a shorter duration than the liabilities, the rise in bond values will fall short of liability increases
- A second order effect is that rates do not necessarily change by the same amount at all terms

Implementing LDI

- Several approaches – some typical examples:
  - Bonds
  - Futures
  - Swaps
  - Swaptions
- Important to choose the right interest rate
  - Are you hedging corporate bond, risk free or other rates?

Is LDI a good idea generally?

J.P.Morgan
Asset Management

How well can LDI work?

- Principle behind LDI is to have fixed interest assets whose payments will meet accumulated obligations
- But non-fixed interest assets might also do this…
- …albeit with some volatility…
- …but at lower expected cost
- Also, liabilities are rarely known exactly…
- …meaning that even fixed interest (and index-linked) assets will not give a perfect match

J.P.Morgan
Asset Management

The long and short view

- LDI takes a short-term view…
- …in that it seeks to ensure that the interest rate risk is hedged at all times
- However, some investors can take a longer term view…
- …
- It is also relevant only if a short-term view is being taken
  - LDI essentially assumes that sufficient assets are required at all times to meet liabilities…
  - …whilst this might not be true for investors who can take a longer term view

J.P.Morgan
Asset Management

Upside and downside risks

- Long-term interest rates are low
- How much lower can they go?
- Some (just look at Japan)…
- …but the extent to which they can increase is much greater…
- …particularly over the long term

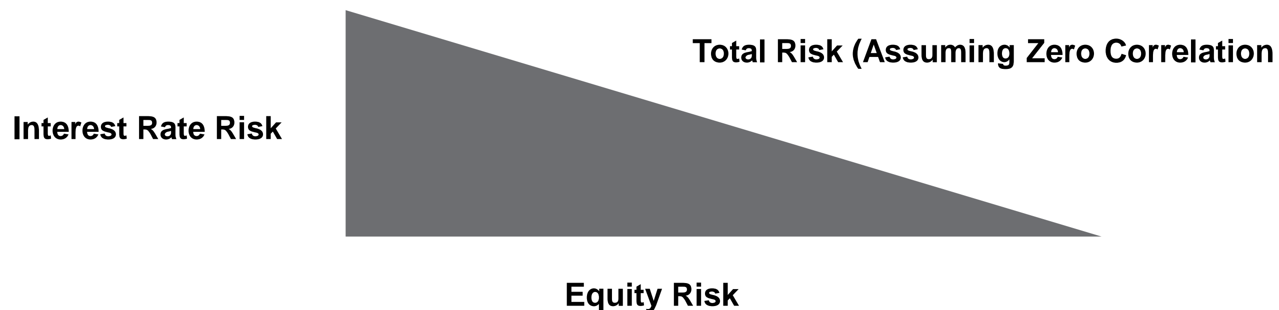
Market dynamics

- Long-term yields understate interest rate expectations
- Insurance company hedging requirements have depressed long-term yields for some time…
- …but central bank intervention is now also depressing medium-term yields

J.P.Morgan
Asset Management

Proportionality

- Interest rate risk is not the only risk…
- …and in many cases it is not the dominant one
- In particular, significant exposure to equities can drown any benefits of LDI
- One way to think about this is in terms of triangles…



J.P.Morgan
Asset Management

Is LDI a good idea for local authorities?

J.P.Morgan
Asset Management

The long and short view

- Local authorities have a long-term view…
- …supported by an unbeatable sponsor covenant…
- …allowing them to take a longer-term view, riding out volatility
- This suggests local authority pension funds should be less interested in LDI

J.P.Morgan
Asset Management

Concentration of risk

- There is a concentration of risk from some LDI strategies
- In the event that the creditworthiness of Gilts comes into question…
- …then the ability to meet any resulting deficit (sponsor strength) might also be impaired
- This can also be thought of as using one form of government promise (Gilts) to back another (liabilities)
- This suggests that a Gilt-based LDI strategy in particular might lead to an increased risk…
- …at least in one dimension

Short-term support for local authority LDI

- There is potentially a link between long-term interest rates and local authority income
- Interest rates are lower when growth is weak…
- …meaning local authority revenue may be lower when liabilities are higher…
- …suggesting there may be merit in LDI strategies
- This assumes that long-term interest rates are reflected in valuation discount rates…
- …and that contributions are not otherwise smoothed

J.P.Morgan
Asset Management

Conclusion

J.P.Morgan
Asset Management

Conclusion

- LDI can be very useful for some institutional pension schemes…
- …but mainly those with short-term considerations
- Even if a short-term view is taken, LDI should be used only if it is proportional
- For local authority schemes, these considerations are magnified
  - They do have very strong sponsor covenants, allowing them to take long-term views…
  - …but if there are short-term considerations, the link between local authority income and long-term rates supports LDI

J.P.Morgan
Asset Management