LASH risk and interest rates

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Summary

- Different implications of pension fund mark-to-market profits/losses for
  - LT assets and liabilities: reassessment of solvency, no impact on liquidity
  - hedging portfolio: liquidity impacted through margin requirements
- Mtm losses on the hedge $\Rightarrow$ margin call $\Rightarrow$ bond sale $\Rightarrow$ price impact $\Rightarrow$ ...
  - margin spiral à la Brunnermeier and Pedersen (2009)
- Fits the narrative of the 2022 LDI episode in the UK

Comment: mtm accounting

- The literature on mtm accounting has many of the same ingredients
  - mtm of assets can result in fire sales, adversely impact liquidity, ...
  - Allen and Carletti (2008), Plantin, Sapra, and Shin (2008), Heaton, Lucas, and McDonald (2010), Adrian and Shin (2010), ...

Comment: convexity

- Pure ALM considerations may induce bond sales when r increase
  - Domanski, Shin, and Sushko (2017)
- Indeed, consider a fund that
  - maintains Duration (Assets) = Duration (Liabilities)
  - has Convexity (Assets) $<$ Convexity (Liabilities)
- Liquidity plays no role here, can the two channels be disentangled?

Comment: hedging vs risk taking

- Low r and hence low funding ratios are associated with high LASH risk
    - authors: funds become more risk averse and hedge more
    - alternative: funds tilt cash positions towards risky assets, fill the duration gap
- Evidence of the risk-taking motive among US pension funds
    - Klingler and Sundaresan (2019), Barth et al. (2024)
- Discussion of optimal portfolios implied by pension funds' objectives would help
    - authors posit loss aversion: non-linear risk-taking depending on r

Comment: impact on yields

- Conceptually, market segmentation is required for demand factors to impact yields
- Derivatives LASH: fund losses correspond to gains for likely bond investors
    - is the impact on bond yields higher for repo LASH?
- Taking an equilibrium perspective could be instructive

Conclusion

- A very interesting paper with a wealth of new data and institutional details!