Liquidity stress and risk monitoring: the case of Liability-Driven Investment funds

AWG/MPAG workshop

Main messages and contribution of paper

Focus on EU LDI GBP funds in the context of '22 Mini Budget

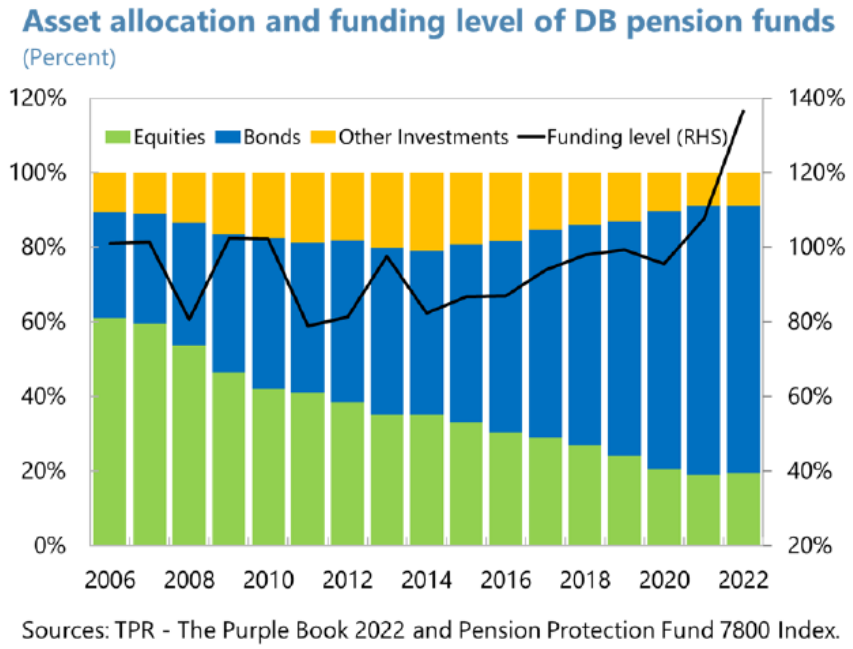
- Leverage (repo and derivatives) increased already in H1 2022, while liquid assets declined
- Asset holdings of LDI funds is similar; Concentrated derivatives and repo exposures; High degree of collateral overlap.
- Stress test show most LDI funds would be resilient to large interest rate shocks.

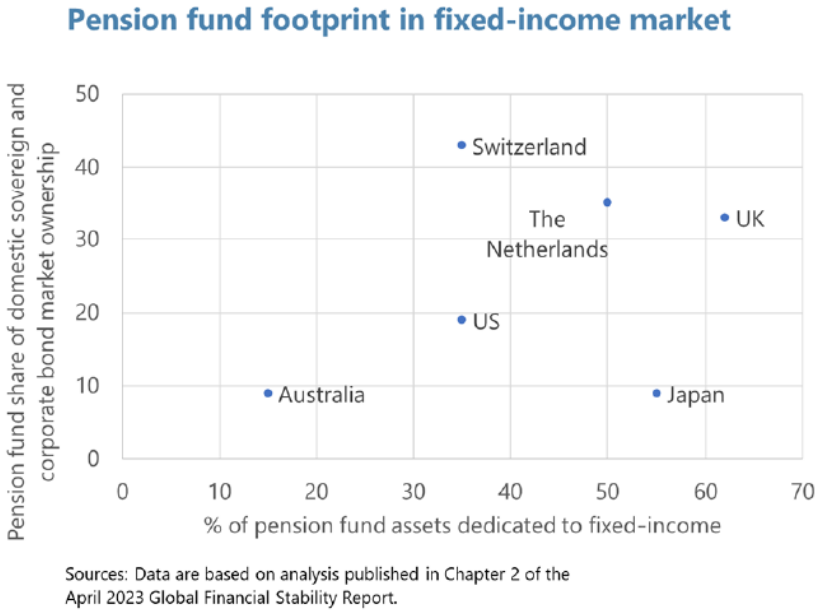
Unique aspects

- Combines various data sources
- Helps to shed light on cross-border NBFI linkages
- Use High-frequency data

Context – UK pension funds

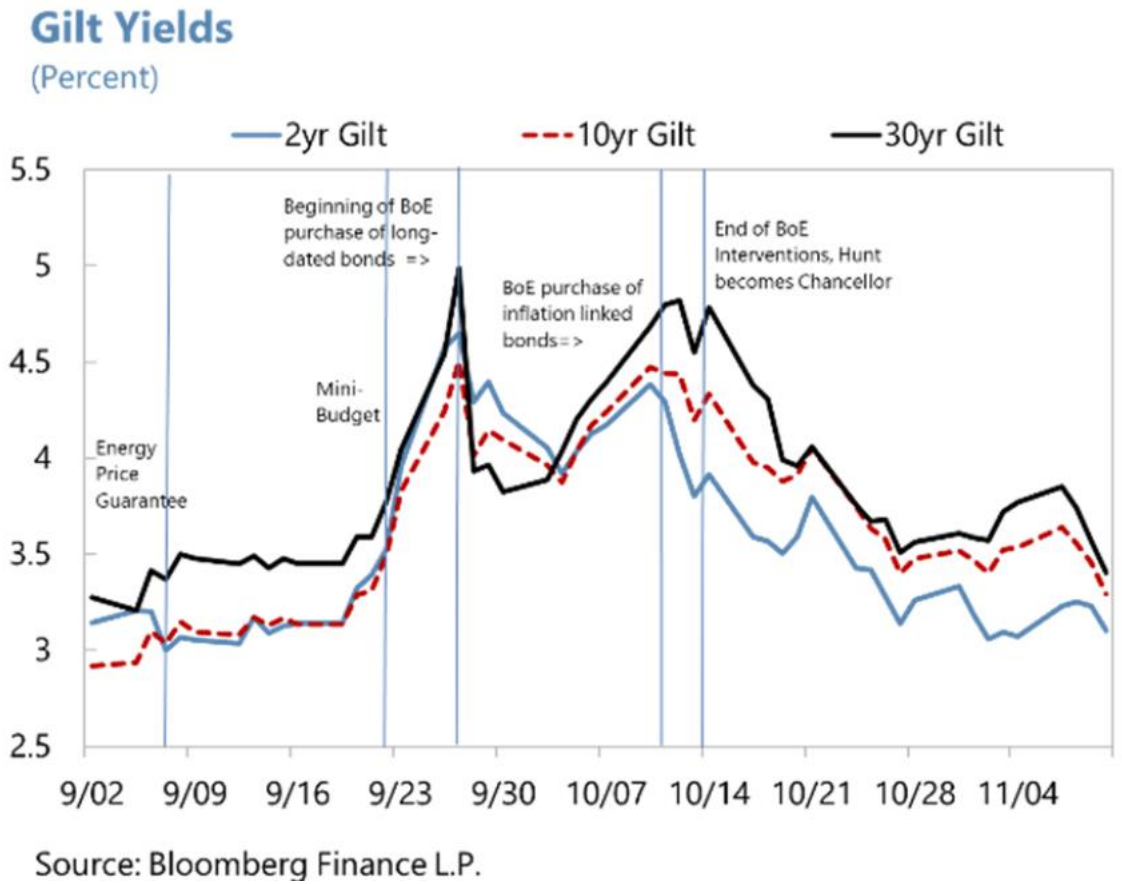
- **DB pension fund have increasingly used LDI strategies since early 2000s**
- Structural changes in UK pension funds and the use of LDI strategies → relatively sizeable gilt holdings
- Asset managers launched "pooled" LDI funds
- LDI strategy:
  - ↓interest rate = LDI strategies return a profit, which helps to offset the rise in the present value of pension liabilities
  - ↑interest rate = ↓PV of liabilities = increases pension fund solvency, but LDI strategies incur losses





Context – The mini-budget

- The UK's September 2022 "mini-budget" unnerved the UK's core financial markets
  - The pound fell to a record low against the dollar
  - **Historic moves in gilt yields exceeding any standard stress test parameters**



Source: Bloomberg Finance L.P.

Future work to consider

- **Historic moves in gilt yields in 2022 exceeded any standard stress test parameters**
    - In context of previous surprise, reverse stress testing could be insightful.
- **Pooled LDI funds seemed to have been particularly problematic**
    - Can data shed light on the reaction time of pooled LDI funds and if this has changed.
- **For completeness, it would be interesting to apply to stress-test to Q2 2022, and compare the results directly in this paper to the 2023 data.**