QE's impact on pension fund liabilities

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Summary

- Pension Corporation has previously estimated that QE1 increased UK pension fund deficits by £74 billion, which costs UK business an additional £7.4 billion a year
  - QE2 could compound these costs
- BUT, if QE1 had had no impact on very long Gilts and only reduced yields in short and medium-term Gilts, pension fund deficits could actually have fallen
- This note:
  - Looks at where the Bank of England should concentrate its firepower through QE, to help UK business
  - Looks in more detail at who is issuing bonds across the curve – and who benefits from QE
  - Explains why the Bank of England buying very long Gilts (over 25 years) is bad for both the economy and pension funds
  - Looks at why QE should be tailored better to avoid hitting pension funds

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What QE tries to do

- Explicitly:
  - Lower Gilt yields to encourage borrowing
  - Gilt holders are meant to sell Gilts and reallocate to higher yielding assets
  - Increase in the money supply
  - Weaken Sterling
  - Increase inflation
- All aimed to achieve higher economic growth (nominal GDP)
- However, a key factor is that pension fund liabilities are measured off Gilt yields and as Gilt yields fall those liabilities rise, increasing deficits
  - Pension funds that want to de-risk (or reduce deficits) may end up buying more Gilts to better match their liabilities

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Over 25 years Sterling bond issuance, since 2009

- From the start of 2009, when QE was first mooted, to end Sep 2011, £720 billion of fixed rate Sterling bonds were issued, of which:
  - £437 billion of conventional Gilts issued by the UK Government
  - £283 billion of fixed rate Sterling corporate bonds issued

- However, £122 billion of fixed rated Sterling bonds over 25 years issued since 2009:
  - £31 billion non-Gilt issuance (of which £9 billion overseas issuers)
  - £91 billion or 75% issued by UK Government – see below

- **Government is by far the biggest issuer of over 25 year bonds**

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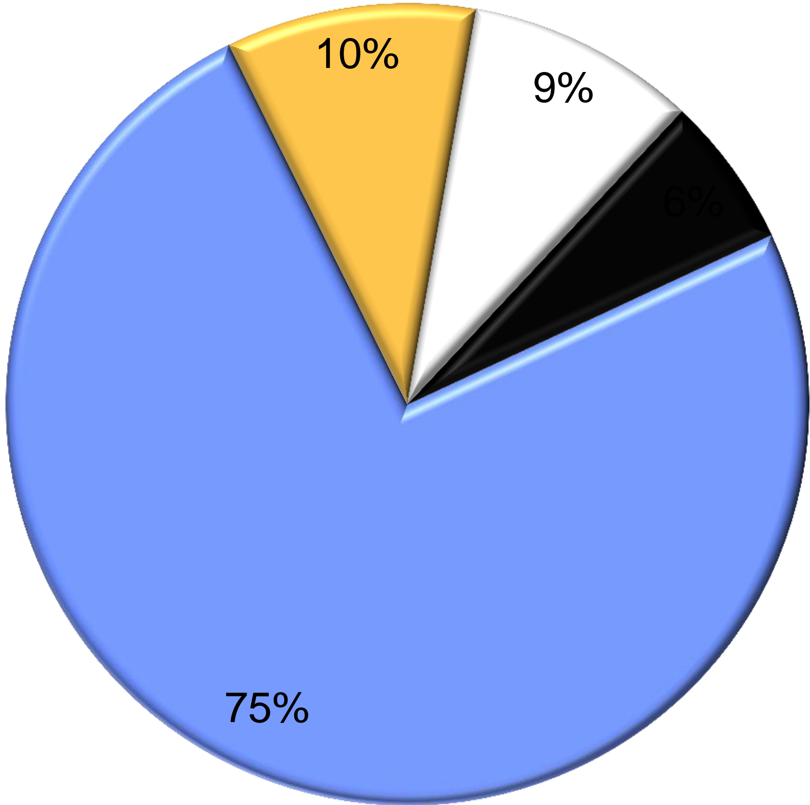
Sterling bond issuance, over 25 years since 2009



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Who benefits from lower yields?

- BoE implied QE1 reduced yields by 1% - if this were true, annual saving due to lower Gilt coupons are:
  1. UK Government - £4.4 billion (i.e. 1% of £437 billion gilts issued)
  2. Corporates - £2.8 billion (i.e. 1% of £ 283 billion non-gilts issued)
- Only large corporates get benefit from lower borrowing yields, SMEs do not have the benefit as they have to borrow from the bank market, not the capital markets
- But higher pension fund deficits meant £7.4 billion goes out of corporates into pension funds annually:
  - ►Corporates worse off, Government better off
  - ►SMEs disproportionally hit by QE

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Over 25 year liabilities are much more sensitive to changes in gilt yields

- As pension fund have long dated liabilities they are sensitive to moves in long rates
- Pension Corporation estimates that if Gilt yields move in parallel across the curve, over 25 year liabilities account for 58% of the movement in the value of the pension fund liabilities, but over 25 year liabilities typically represent only 30% of a pension fund's value
  - DB pension schemes have an estimated £1 trillion of liabilities with a 20 year duration
  - The movement in these long liabilities represents c.£110 billion of the approximate £200 billion rise in pension fund liabilities under QE1 due to the 1% fall in gilt yields
- Initially, QE1 did not target over 25 year Gilts – so why has QE2 moved to this area?
- **At the long end, the UK Government is the main beneficiary of lower yields and pension funds and sponsors are the main losers**

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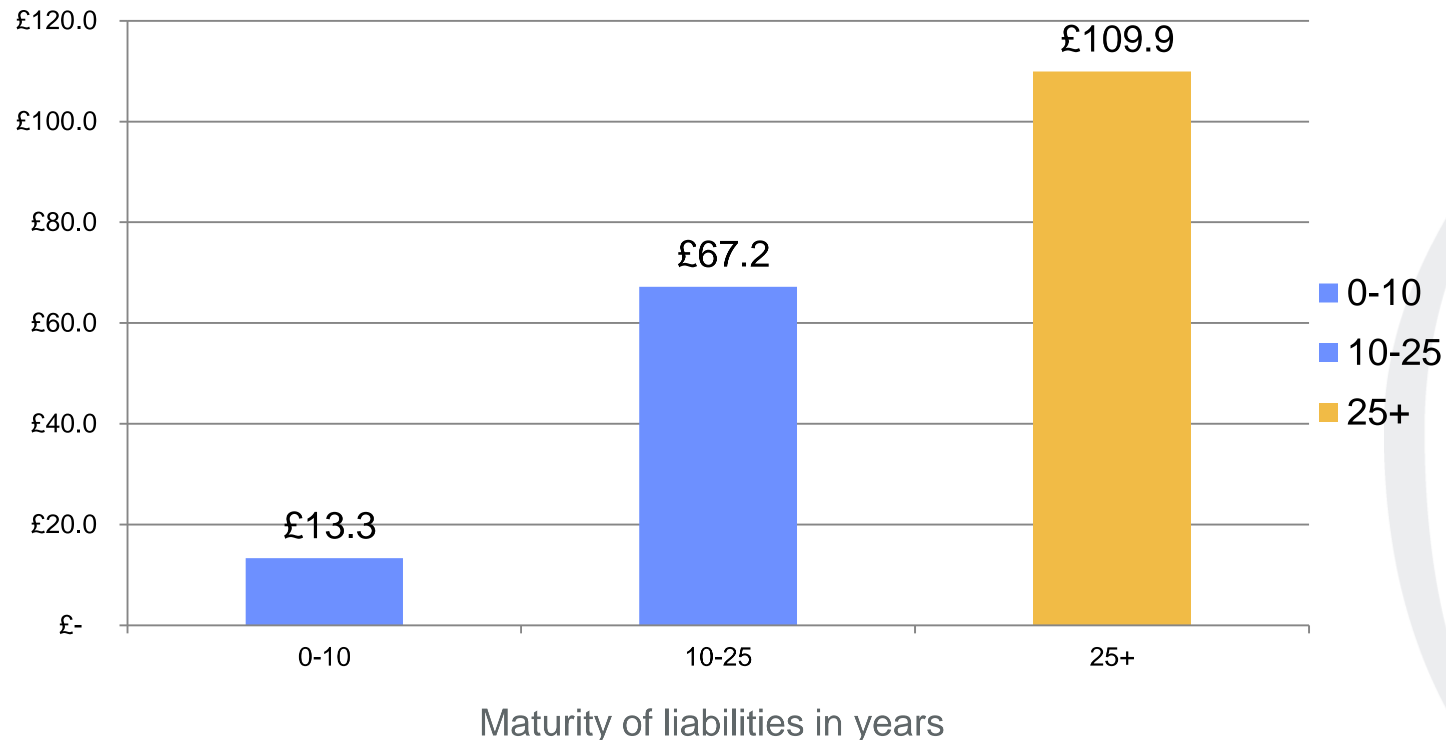
Maturity and rate sensitivity of pension fund liabilities



Over 25 year liabilities are about 30% of value and about 58% of overall rate sensitivity of liabilities, as long dated liabilities move more for a similar rate shift

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QE-D

- QE should concentrate its firepower at short/medium duration Gilts below 25 years
- This would NOT adversely impact corporates, but would have a beneficial impact on pension funds and their corporate sponsors
- Consider buying bank bonds
  - While banks borrow at higher rates than they can lend, they will not be profitable, so will not lend
  - Confidence is low in banks and purchases would help ability to fund themselves, especially in senior unsecured
- Yields are driven lower by QE buying and this can cause subsequent further allocations to Gilts from de-risking pension schemes; annuitants get low rates
  - Pensioners and other savers are effectively forced buyers of very low return (negative real yields) assets
- Government gets cheap funding - especially at very long maturities

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Contact

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Mark has over 25 years experience in bond markets and has managed a wide range of bonds funds both for pension and retail clients. Prior to joining Pension Corporation he spent 8 years at Morley and 7 years at Gartmore, where he was Head of Credit and was responsible for developing Gartmore's credit process for funds investing in sterling corporate bonds and high yield. Mark previously worked in corporate bond sales and corporate finance at BZW. He has an MBA from Cranfield School of Management. Mark is a Co-optee on the NAPF Investment Council.

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