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- **Pension Funds: Markets and Risk**

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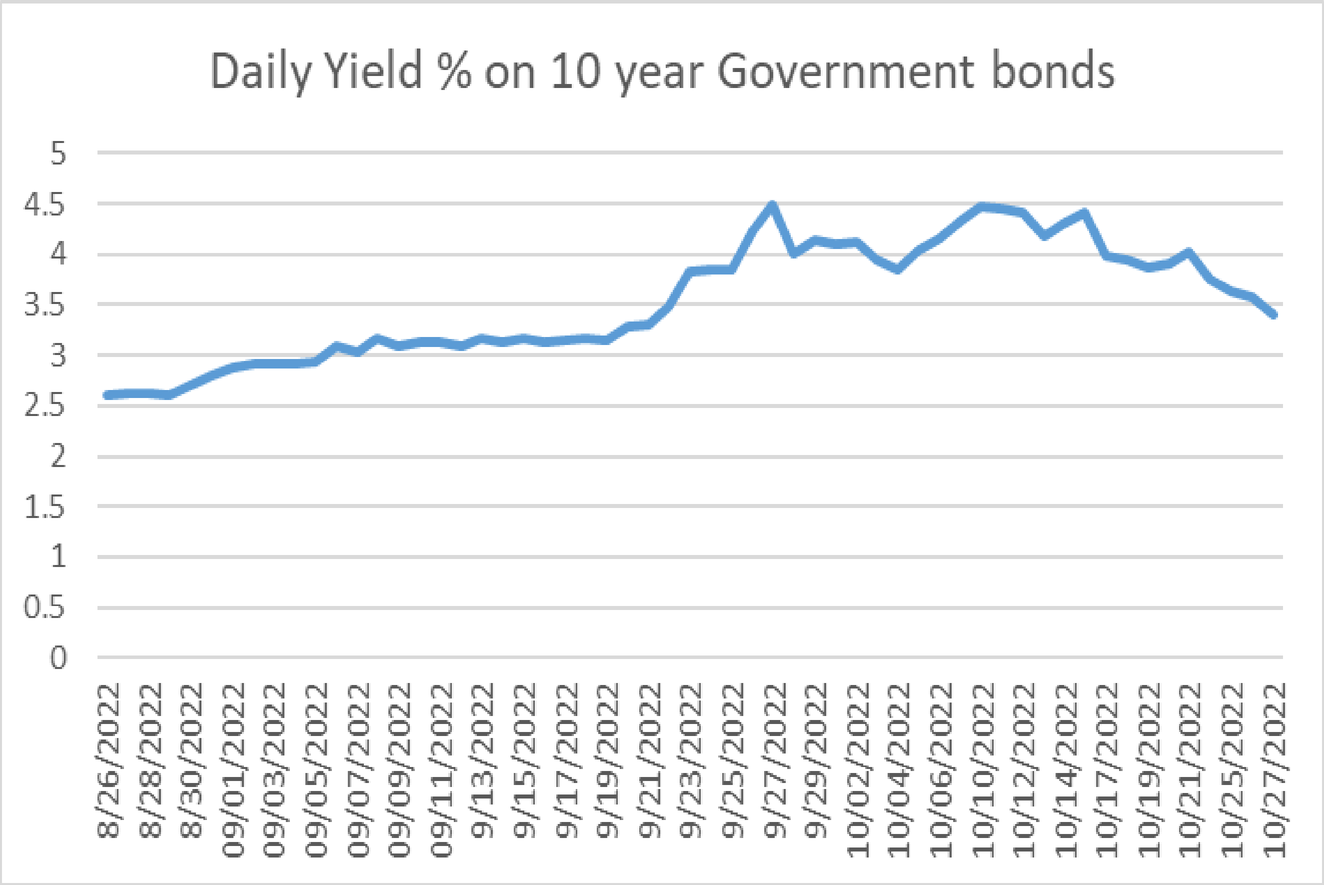
Issues Considered

- The relationship between pension funds markets and risk has become much more centre stage.
- This paper considers three issues
- 1 volatility in pension fund assets
- 2 The growth of Defined Contribution schemes and transference of risk to scheme members.
- 3 Some possible effects of IORP II on the Irish pension system

Volaltility in Bond Markets: The ‘Kwasi’ Crash

- The start :-Mini-Budget Statement in UK on 23rd September2022
- Large unfunded tax cuts announced.
- In succeeding days UK pension schemes fell in value by around £500 billion.
- BT scheme’s asset fell by around £11bn to an estimated £36 billion between September 23 and 28 2022 .
- In the year to 23rd September BT pension fund assets had already fallen by £10.4 billion.
- Falls resulted in large purchases of Government debt by the Bank of England
- This been described as “ not quite a Lehman moment. But it got close.”
- The chart shows relatively dramatic changes in yield (and hence prices) for10 year Government debt

Daily yield on UK 10 Year Government Bonds Aug 2022- Sept. 2022

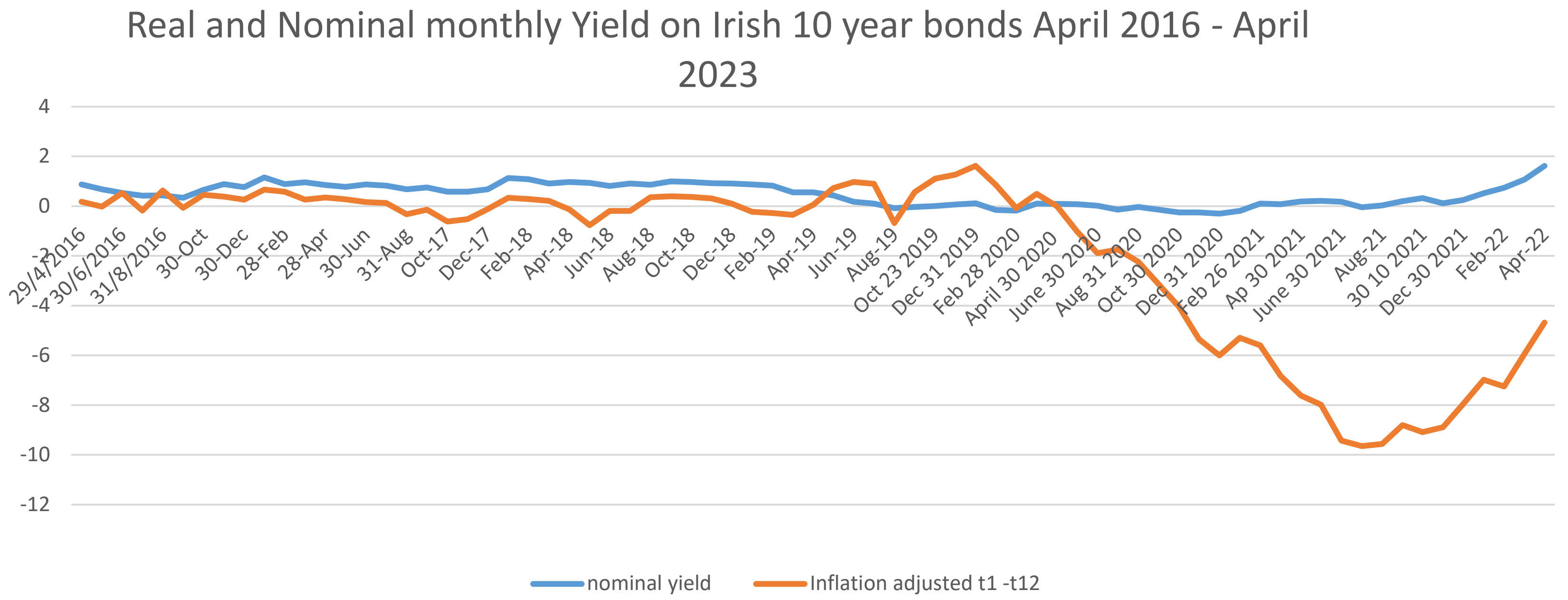


Liability Driven Investing (LDI)

- Volatility in bond prices due to changes in monetary policy (the ending of Central Bank bond purchases and rising Central Bank interest rates) also has implications for Irish Pension Scheme assets as discussed later.
- However UK pension fund losses were exacerbated by investment strategies - Liability Driven Investments (LDI).
- Large amounts of short term borrowing (with zero interest rates) and purchase of long dated debt with low but positive interest rates (0.232% on 30/9 /2020).
- A fall in Government bonds led to a feedback cycle of falling bond values as bond investments were sold.
- Changes in monetary policy and losses on bond holdings have also been instrumental in difficulties in other financial institutions, for example SVB Bank in the U.S.

Risk, Inflation and Government Bonds

- Inflation increased from -1% in November 2020 to 9.6% for the months June-Aug. 2022 and fell to 5.9% in April 2023.
- Recent reports such as the Pensions Commission did not anticipate and did not discuss the return of inflation for pension systems and pensions in payment.
- Inflation affects pensions in a number of ways – real yields fall.



Pension Fund assets in Ireland and Government Bonds

Bond prices fell (as price movements are inverse to yields).

Total loss depends on the proportion of bonds in pension fund portfolios.

- Defined Benefit schemes are particularly adversely affected.
- Government and other debt amounted to 45.1% of total assets in 2020

	DB Assets[1]	Gov. and other debt %[1]	Pensions Board Data%[2]	DC Assets [1]	Gov. and other debt %[1]	Total Assets IAPF Data
2020	N.A.	N.A.	45.1	N.A.	N.A.	
2019	94.0	42.1	44.6	59.9	22.6	153.9
2018	90.7	40.8	42.0	52.6	22.9	143.3
2017	91.2	35.5	40.6	56.4	20.6	147.6
2016	77.9	36.9	42.4	47.6	22.8	125.5
2015	71.3	39.0	41.8	43.7	23.6	115.0

What about other assets ?

- The Graph shows that the ISEQ Equity Index is very variable and below the highest point in 2007
- Note returns from investing in equities are not the same as index movements but they are correlated.

The Growth of Defined contribution Schemes : Automatic Enrolment

- Returns and volatility in pensions funds is important for scheme members and will become more important.
- Why ? Expansion of Defined Contribution schemes including via Automatic Enrolment (AE).
- The proposed scheme AE has many similarities to the equivalent UK scheme.
- Scheme will be a funded scheme managed by investment managers.
- For these and other reasons itis likely to suffer similar defects (e.g. Large no. of inactive members; low values of accumulated funds -£2195 in March 2022).
- Risks remain with individual members.,
- Advocates for AE claim that superior returns will result from lower costs and higher returns because of an ‘equity risk premium’

The Equity Risk premium

- In particular it has been argued that these higher returns will be achieved by only investing in equities for longer periods (up to 70 years).
- Advocates cite studies (mostly from financial institutions) claiming an additional return over bonds of over 4%
- It is also acknowledged that "no one can predict the equity risk premium, particularly over the next 70 years or longer", it is also been stated that "The only thing we can be sure of is that it **must be positive** in the very long-term".
- Equity Risk Premium has a particular narrow meaning - defined as the historic return on equity minus the risk free rate of return.
- The risk free rate is in turn defined as the historic yield on short date Government bonds. In practice it is taken to be the yield on U.S. Treasury securities.

Measuring the equity risk premium: Some Issues

There may be Survivor bias; Only firms that survive are included.

- Returns may be difficult to define.
- Index construction is important - arithmetic or geometric mean can lead to different results.
- Other research indicates that over the very long term (> 100 years) returns are heavily influenced by whether a country has suffered some catastrophic event (war or invasion – Germany, regime change - Russia)
- Thus the equity risk premium for the U.S. is atypical
- Jorion and Grotzman, Journal of Finance, June 1999, state (p. 978) :-
- ".. .. the 4.3 percent real capital appreciation return on U.S. stocks is rather exceptional, as other markets have typically had a median return of only 0.8 percent".
- Returns for Sweden and Switzerland are also exceptional.

Assets have fallen in value but Solvency has increased: DB Schemes

DB Schemes:

It is likely that the solvency position of many DB schemes has improved this year – asset values fell but liabilities fell even more. (Pensions Authority, 2022)

DB solvency has improved as a result of higher interest rates which are a consequence of higher inflation. (Pensions Authority, 2022)

According to the Pensions Authority (2022) very few funded DB schemes provide post -retirement pension increases.

Improved solvency has been achieved as a result of a reduction in the real benefit of retirement benefits. (Pensions Authority, 2022)

Assets have also fallen in value for DC Schemes

DC Schemes:

Many DC schemes will be concerned about recent investment returns especially those who are close to retirement. (Pensions Authority 2022)

The re-emergence of significant inflation means that in real terms the returns have been even worse than they look. (Pensions Authority 2022)

Trustees should be satisfied their investment strategy for default funds takes account of short-term risks as members approach retirement and indeed of their members likely risk appetite. (Pensions Authority, 2022)

EU Directive - IORP 11

Unique issue for Irish Occupational Pension Schemes

- disproportionately high number of small schemes.
- Costs of compliance could be prohibitive especially for up to 100,000 small (less than 100 members) schemes

Impact: Substantial Increase in Regulation

- Additional trustee, custodial and actuarial requirements
- Resultant increased costs- up to 250%
- Restrictions on investment options- invest in regulated markets, restriction on property investments, environmental, social and governance issues to be factored into investment.
- Ban on borrowing

For small schemes changes are not Practical

- For many schemes, putting in place the additional structures and processes required by the transposition of IORP 11 will not be practical or cost efficient
- What are alternatives ?
- Sponsoring employers and trustees will be considering;

  PRSA's

  Master trust.

  Auto Enrolment

A Switch to Auto-Enrolment ?

Existing small schemes may switch to Auto -Enrolment –

Lower costs-

Many administrative tasks undertaken by the State, for example collecting contributions;

Lower employer contributions;

In the case of DB schemes transference of risk from employer to employee.

But

- "opt outs" may be a feature ;
- Potential drop in overall pension coverage;
- Drop in income replacement rates

Concluding Comments

- Essential point of a pension system is to transfer future resources from those at work to those not at work.
- Key issues are what Is the most efficient means of achieving this transfer?
- What is lowest risk?
- What is equitable?
- No pension system can be organised without cost and without risk
- Will Auto Enrolment replace existing some existing DC and especially DC schemes ?