



Investment Update May 2016

Investment Headlines & Comment

- Nominal and real gilt yields fall.
- Property slows but is positive.
- Emerging Markets fall again.

Feature Section This month we find the editor queuing for space at St Dymphna's home for nervous wrecks. Readers will have seen previous columns on Liability Driven Investment ("LDI") – see our [September 2014](#) edition for background (and references to previous editions) – here we ponder whether LDI is now actually *increasing* pension schemes' risk rather than reducing it. There seem to be three areas of concern at the moment:

Value-at-Risk Much of the continuing claim of the existence of interest rate and inflation rate risk needing to be removed by Trustees comes from consultants' use of Value-at-Risk (VaR) models, many of which are heavily based on extrapolating the past volatility of interest rates and inflation (see the [January 2015](#) edition for discussion on VaR models). There has to be a concern that these models encourage LDI implementation regardless of the yields prevailing in the gilt markets. At what yields would pro-LDI advisers see their updated VaR outputs as indicating a material *reduction* in the perceived interest rate risk, and hence less of a case for LDI? If there is no such yield level, is the gilt market set for a destabilising self-perpetuating fall in yields? (Nominal and real long-dated yields are hovering near their modern era month-end lows of 2% and minus 1% respectively.) Further, whilst pension funds may be the sector driving the gilt market at the moment (a factor noted by the Debt Management Office (DMO) in their press release on the recent 2065 gilt issue, as we noted in our last issue), what happens as Defined Benefit schemes' assets contract as they mature, and hence other gilt market ownership sectors move to the fore in terms of influencing market movements?

Regulator policy risk It is clear that the size of the UK's funded private and public sector liabilities dwarfs the relevant maturity sections of the gilt and sterling corporate bond markets, and that a substantial element of the LDI implementation relies on investment banks as counterparties. Whilst the LDI market coped with the demise of Lehmans (at a time when the LDI market was much smaller), and there have been additional measures introduced since then to try to reduce the impact of counterparty risk, it is fair to ask whether the LDI market could now cope with the demise of a sizeable counterparty, not just in terms of the (relatively small) mark-to-market loss, but also in terms of the ability to re-introduce the hedge elsewhere (with issues on the time required to do this, and the pricing terms that would be achieved, bearing in mind that something drastic would have triggered the demise of the counterparty, and hence market conditions are unlikely to be terribly stable at the time). Ultimately, if the Regulator concludes that instead of being invested in gilts, UK pension schemes are actually overly exposed to a small number of counterparty banks, is there a risk of policy change that in turn leads to significant unwinding of LDI positions?

Gilt supply developments The 2016 Budget forecasts show little likelihood of the Government paying off any of the Gilts that mature in the next 5 years, so there will be gilt re-issuance of £400bn+ as a result (given the amount of 1-5 year gilts in issue), with much of it being transacted as medium- and longer-dated gilts. There is also the existing Quantitative Easing (QE) portfolio, of comparable size, which could in theory be sold by the Bank of England into the market at any stage. LDI advocates would claim that the wall of demand from pension schemes can absorb these, but is there a risk of yields rising faster than currently implied in the yield curve? (We doubt that market participants are considering the supply issue as extensively as other 'more visible' factors like expected movements in short-term interest rates, not least because market participants can't know how the DMO will choose to refinance the £400bn, or which parts of the QE portfolio would be sold off when. It is also plausible that corporate bond yields would not change much in absolute value, i.e. that Gilt-supply issues would affect the gilt market by more.)

Readers with long memories may recall [Long-Term Capital Management](#), a hedge fund involving Nobel Prize winning financial economists, which initially had a run of excellent returns, but then almost broke the US financial system in the late 1990s, such was the exposure of many major investment banks as their counterparties. Their VaR models seemingly assumed the future would be like the past, calculated very small risk outputs so they leveraged up and bet the farm ... and lost everything. The UK's LDI scenario is deriving large VaR outputs and therefore advising Trustees to leverage up and buy gilts at any price, creating a run of excellent bond market returns, but are these Trustees destined to lose as well?



Asset Returns and Financial Measures [in Sterling unless marked otherwise]

The cells in bold with light shading show the best and worst performing asset classes from each column. The commodities and \$-based and unhedged-£-conversion hedge fund returns are excluded from that.

[NB Future returns cannot be inferred from this table alone, but coupled with other items within *Update*, readers can make inferences as to whether they should be higher or lower than the past returns shown below.]

Table 1: Investment Data to 31 May 2016

Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)	20 years (% p.a.)
UK Equities	0.7	3.8	-6.3	3.1	5.6	5.3	6.5
Overseas Equities	0.9	4.9	0.3	7.7	8.7	8.0	6.8
US Equities	2.5	4.7	5.9	12.4	14.3	10.2	7.2
Europe ex UK Equities	-0.1	4.6	-3.6	4.1	4.0	5.3	8.3
Japan Equities	-0.2	4.3	-2.9	6.5	8.3	3.1	0.8
Pacific ex Japan Equities	-1.0	5.3	-10.9	0.7	2.1	8.6	5.4
Emerging Markets	-3.1	5.0	-13.3	-3.3	-2.1	6.1	5.6
UK Long-dated Gilts	3.4	1.6	8.9	9.9	10.5	7.7	8.6
UK Long-dated Corp. Bonds	2.2	6.9	4.6	7.2	9.0	6.5	-
UK Over 5 Yrs Index-Linked Gilts	2.2	0.7	2.0	6.3	8.9	7.9	8.0
High Yield (Global)	0.7	4.5	5.2	3.9	7.5	10.0	-
Overseas Bonds	-0.8	-2.3	13.0	3.0	3.2	6.8	5.1
Property *	0.5	1.0	11.2	14.6	10.5	4.9	8.9
Cash	0.0	0.1	0.6	0.6	0.7	2.0	3.7
Commodities £-converted	2.9	13.1	-22.7	-18.7	-12.9	-7.8	-1.0
Hedge Funds original \$ basis *	1.0	3.1	-3.8	2.3	1.7	3.3	7.2
Illustrative £-converted version *	-0.9	-0.2	0.9	4.4	4.4	5.6	7.3
Euro relative to Sterling	-2.2	-1.9	6.5	-3.6	-2.6	1.1	-
US \$ relative to Sterling	0.7	-4.3	4.8	1.4	2.5	2.6	0.3
Japanese Yen relative to Sterling	-2.9	-2.6	17.3	-1.7	-3.7	2.7	0.2
Sterling trade weighted	1.5	3.5	-4.4	3.0	1.8	-1.4	0.2
Price Inflation (RPI) *	0.1	1.0	1.3	1.6	2.2	2.9	2.7
Price Inflation (CPI) *	0.0	0.7	0.3	0.6	1.5	2.4	1.9
Price Inflation (RPIX) *	0.1	1.0	1.4	1.6	2.2	3.1	2.7
Earnings Inflation **	8.5	11.4	2.0	2.8	1.7	2.5	3.7
All Share Capital Growth	0.2	2.5	-9.7	-0.4	1.9	1.6	3.0
Net Dividend Growth	0.8	-1.4	4.2	3.6	6.8	3.4	-
Earnings Growth	-13.4	-12.1	-51.5	-22.4	-14.9	-5.8	-0.1

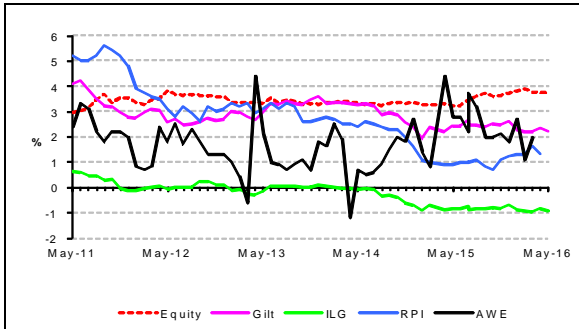
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- UK Equities (incl. dividends and earnings) – FT-A All Share.
- Overseas Equities (incl. regions) – blend of FT All-World / World subindices
- Emerging Markets from MSCI US \$ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment restrictions), conversion to UK £ by J&A.
- UK Bonds – FT-A indices (Gilts Over 15 Years, ILG Over 5 Years)
- UK Corporate Bonds – iBoxx Non-Gilt **Over 15 Year** index (all credit ratings combined)
- High Yield – Merrill Lynch Global, £ Unhedged
- Overseas Bonds – JP Morgan Traded Unhedged World ex UK
- Property – IPD Monthly Index
- Commodities – GSCI Total Return, converted to UK £ by J&A
- Hedge Funds Composite – HFRI US \$ based total return index plus converted to UK £ by J&A. **NB A smooth “cash+x%” return will only be shown in the base ‘hedged’ currency, here the US \$.**
- Cash – an indicative index based on the three-month London Interbank Sterling mid-rate, calculated internally by J&A
- Price and earnings inflation – RPI, CPI, RPIX, and Average Weekly Earnings (whole economy, not seasonally adjusted, latest provisional data)
- Currency data – London close, from the Financial Times
- * denotes data lagged by 1 month, ** by 2 months – these reflect the later publication dates of these data items.

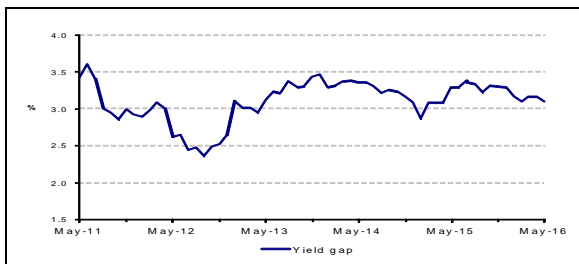


Yields and Yield Gaps

Figure 2: Yields, Inflation and Yield Gaps



The yield gap is a measure of expected average future inflation, derived as long bond yield minus ILG yield.

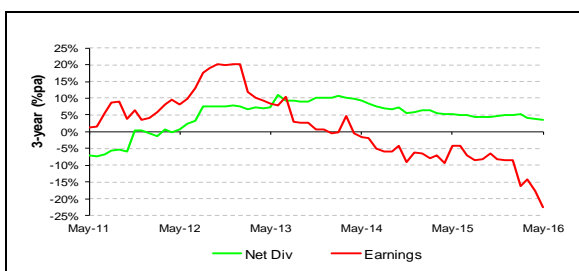
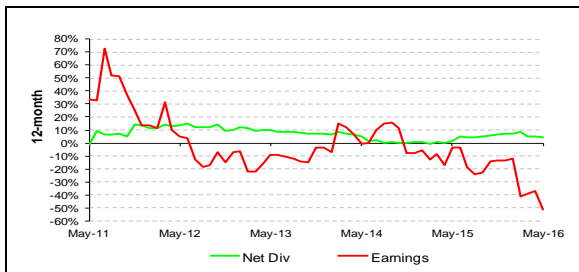


The gap gives a current expectation around 3.1% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

Growth in Earnings and Dividends

These charts show movements in rolling 12-month and 3-year dividend and earnings growth for UK Equities over the last 5 years. [NB the charts have different scales]

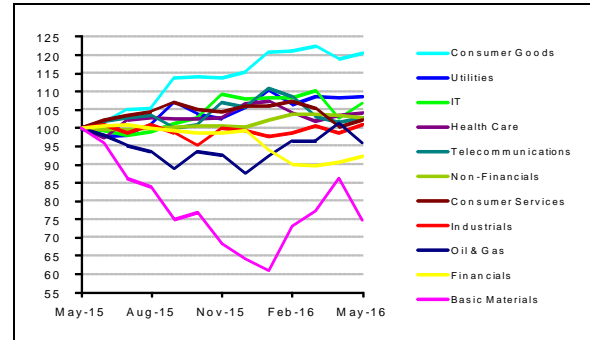
Figure 3: Dividend & Earnings Growth



Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



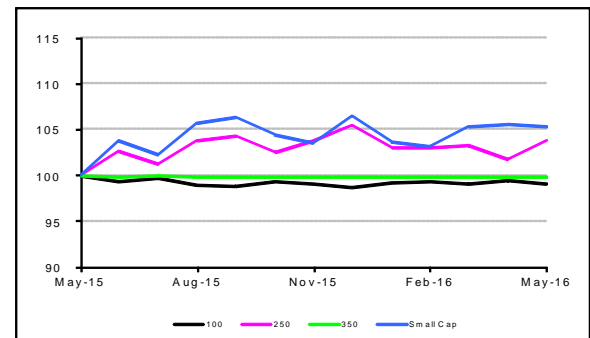
Note: Sector labels for relative lines are in end-value order

There was a rise this month in the rolling 12-month sector dispersion (from 38% to 46%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	-4.7	3.1	-10.3
Basic Materials	-12.6	6.1	-30.0
Industrials	2.9	6.3	-5.5
Consumer Goods	2.1	3.3	12.9
Health Care	1.2	3.7	-2.4
Consumer Services	2.5	-1.1	-4.2
Telecommunications	2.1	-1.5	-3.5
Utilities	0.8	5.9	1.7
Non-Financials	0.1	2.9	-3.7
Financials	2.5	6.6	-13.5
IT	5.0	2.4	0.0
All Share	0.7	3.8	-6.3

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Large and Small Cap fell slightly in relative terms this month, but Mid Cap rose in relative terms.

FRS17 volatility indicator

Now discontinued, but available on request.

Sources for charts on this page:
Financial Times, Office for National Statistics, J&A



Bond market information

Figure 5: £ Non-Gilt Credit Margins

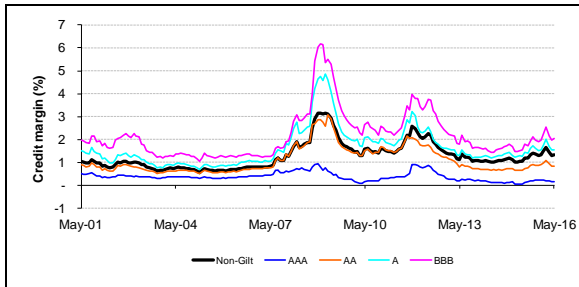


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Dec '15	3.65	2.59	1.06
Jan '16	3.52	2.27	1.25
Feb '16	3.61	2.18	1.43
Mar '16	3.33	2.21	1.12
Apr '16	3.28	2.34	0.94
May '16	3.13	2.18	0.95

Tables 2b, 2c: £ Market Size (£bn) and Maturity

Category	Mkt Val @ May 16 & 13, 10			Weight (%)
	May 16	May 13	May 10	
Gilts (39)	1,275	1,091	743	70.4
Non Gilts (1,011)	535	535	467	29.6
AAA (120)	104	111	141	5.8
AA (191)	96	84	74	5.3
A (330)	159	176	163	8.8
BBB (370)	176	164	90	9.7

Category	Mkt Val @ May 16 & 13		W't (%)	Dur'n (yrs)
Gilts (39)	1,275	1,091	70.4	11.0
< 5 Yrs (11)	344	315	19.0	2.8
5-15 Yrs (12)	391	369	21.6	7.5
> 15 Yrs (16)	539	407	29.8	18.8
Non Gilts (1,011)	535	535	29.6	8.0
< 5 Yrs (336)	156	144	8.6	2.6
5-15 Yrs (438)	230	217	12.7	7.4
> 15 Yrs (237)	149	174	8.2	14.5

£ Gilt Market “main” Issuance

- o £3.16bn 1½% 2021 (2.11x, 0.92%, Apr 16)
 - o £2.87bn 1½% 2026 (1.79x, 1.66%, Apr 16)
 - o £1.50bn 4¼% 2036 (1.72x, 2.11%, Aug 15)
 - o £3.50bn 1/8% IL 2046 (4.37x, ry -0.81%, Jan 16)
 - o £0.76bn 1/8% IL 2058 (1.57x, ry -0.90%, Nov 15)
- Note: Issuance amounts are nominals.

Tables 2d, 2e: € Market Size and Maturity (May 16)

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (329)	5,850	61.1
Non Sovereigns	3,725	38.9
AAA (674)	1,089	11.4
AA (606)	977	10.2
A (776)	784	8.2
BBB (959)	874	9.1

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (749)	2,018	21.1
3 – 5 Yrs (873)	2,073	21.7
5 – 7 Yrs (759)	1,634	17.1
7 – 10 Yrs (626)	1,818	19.0
10+ Yrs (337)	2,032	21.2

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ May 16 & 13)		W't (%)	Dur'n (yrs)
Gilts (27)	518	372	93.6	21.9
< 5 Yrs (3)	50	45	9.0	-
5 – 15 Yrs (7)	130	103	23.6	-
> 15 Yrs (17)	338	223	61.1	29.5
Non Gilts (36)	35	32	6.4	17.0

Table 2g: High Yield bond yields (BB-B indices)

Month End	US (%)	Euro (%)	Sterling (%)
Nov '15	7.03	4.37	6.30
Dec '15	7.51	5.13	6.51
Jan '16	7.81	5.21	6.80
Feb '16	7.62	5.48	7.20
Mar '16	6.95	4.39	6.67
Apr '16	6.41	4.00	6.51
May '16	6.41	3.99	6.45

Sources: Barclays Capital, DMO, iBoxx, J&A, MLX

