



Investment Update April 2016

Investment Headlines & Comment

- The DMO has quietly upped the scope for post-auction “top-ups” from 10% to 15% of the issue.
- The [DMO ascribes this month’s near-record demand of £21.3bn for the 2½% 2065 gilt](#) to pension funds.
- The EU has decided to not impose solvency-based funding on DB schemes.

Feature Section

This month we update our past features on High Yield debt default rates, using the Standard & Poors [annual survey](#), which now covers data to the end of 2015.

This is turning into a fairly regular topic – the data to the end of 2014 was covered in our [July 2015](#) issue.

Figure 1a: Average Cumulative Default Rates (%)
(Extracts from “Table 24” in S&P)

Time	1 year	5-year	10-year
Investment grade	0.10	0.98	2.17
AAA	0.00	0.35	0.72
AA	0.02	0.34	0.79
A	0.06	0.55	1.48
BBB	0.19	1.84	3.89
High Yield	3.80	15.24	21.61
BB	0.73	7.51	13.45
B	3.77	18.27	25.37
CCC/C	26.36	46.43	50.6
All ratings	1.49	6.17	9.09

Source: Standard & Poor’s (also for the Figures below)

Figure 1a shows historical default rates averages across global corporate bonds in 1-, 5- and 10-year versions. The dataset covers 1981-2015 (and the 5- and 10-year figures use rolling sets of overlapping periods, not successive distinct ones), but it does not show comparable recovery rate statistics. However, as per our Figure 5 (on page 4) for Sterling investment grade bonds, actual default rates have been below those priced into yields, even if with no recovery. For example, over the last 5 calendar years, the iBoxx All-Dated Non-Gilts Index returned 6.6% p.a. vs 5.5% p.a. for the FT-A All-Dated Gilt Index (which has longer maturity). Over 10 years, the position is closer with 5.0% p.a. versus 5.2% p.a. Over 15 years, it is 5.9% p.a. vs 5.4% p.a. (Ideally, you would make the comparison over a period of similar start and end yields, likewise for credit margins, to avoid distortions from these factors.)

Figure 1b shows 2015’s moves in isolation (row = start rating, column = end rating). For investment grade it was a good year, with very few bonds falling into sub-investment grade, and some going the opposite way with upgrades. Most bonds retain the same credit rating at the end of the year as at the start, hence a dominant diagonal for the figures in bold, with no rating downgrades for AAA bonds. Eventually there is a sharp decline on the CCC row, reflecting a greater instability for bonds that have got that close to the edge. There were eight defaulted entities in 2015 that S&P had initially rated investment grade, and the time between first rating and date of default averaged 19.2 years. Figure 1c gives an alternative way of looking at the 1-year data from Figure 1a, with the minimum and maximum 1-year default rates by credit rating,

Figure 1b: Global Credit Rating Transitions % in 2015 in isolation
(Extracts from “Table 20” in S&P, with D = Default, N.R. = not rated)

	AAA	AA	A	BBB	BB	B	CCC	D	N.R.
AAA	100.00	-	-	-	-	-	-	-	-
AA	0.29	93.26	4.40	-	-	-	-	-	2.05
A	-	1.43	89.87	5.48	-	-	-	-	3.23
BBB	-	0.06	3.12	85.52	4.90	-	-	-	6.40
BB	-	-	-	3.63	79.97	6.87	0.24	0.16	9.13
B	-	-	-	0.15	3.58	76.04	4.57	2.39	13.27
CCC	-	-	-	-	-	5.85	49.71	25.73	18.71

Figure 1c: Profile of individual year default percentages
(Extracts from “Table 4” in S&P)

	AAA	AA	A	BBB	BB	B	CCC
Min	-	-	-	-	-	0.25	-
Max	-	0.38	0.39	1.01	4.22	13.84	49.46
Average	-	0.02	0.06	0.19	0.73	3.77	26.36

more than, say, 0.4% p.a. from the yield as an allowance for future defaults. (If you do not yet hold the bonds, or expect to reinvest maturing proceeds, there may be an argument for reducing the yield for the risk that credit margins contract before you buy the bonds, but that remains quite a separate issue.) From Table 2b on page 4, the sterling corporate bond market size has not expanded at anything like the rate of the gilt market, so supply could become an issue.



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 30 April 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	1.1	3.9	-5.7	3.9	5.3	4.7	6.4
Overseas Equities	-0.5	5.1	0.1	8.3	8.3	7.1	6.5
US Equities	-1.4	3.9	5.4	13.3	13.8	9.3	7.1
Europe ex UK Equities	0.4	4.5	-3.8	5.2	3.4	4.6	8.1
Japan Equities	2.6	3.1	-0.6	5.4	8.2	2.1	0.4
Pacific ex Japan Equities	-1.8	7.3	-11.5	0.5	2.1	7.6	5.3
Emerging Markets	-1.3	10.1	-13.5	-2.3	-1.8	4.9	5.5
UK Long-dated Gilts	-2.0	-0.1	5.9	7.0	10.0	7.5	8.4
UK Long-dated Corp. Bonds	0.6	3.5	2.7	5.4	8.6	6.4	-
UK Over 5 Yrs Index-Linked Gilts	-2.6	-1.6	0.1	4.3	8.8	7.7	7.8
High Yield (Global)	1.7	6.0	5.2	4.3	7.6	9.7	-
Overseas Bonds	-0.6	3.3	12.1	3.0	3.6	6.7	5.0
Property *	-0.2	1.1	11.7	14.6	10.5	5.0	8.9
Cash	0.0	0.1	0.6	0.6	0.7	2.0	3.7
Commodities £-converted	8.1	9.7	-25.8	-19.1	-14.4	-8.4	-1.3
Hedge Funds original \$ basis *	2.0	-0.6	-3.9	2.2	1.8	3.4	7.3
Illustrative £-converted version *	-1.1	1.9	-0.7	4.0	4.1	5.4	7.7
Euro relative to Sterling	-1.4	2.5	7.2	-2.6	-2.6	1.2	-
US \$ relative to Sterling	-1.9	-3.2	4.9	2.0	2.6	2.2	0.1
Japanese Yen relative to Sterling	3.1	9.6	17.3	-1.1	-2.9	2.9	0.0
Sterling trade weighted	0.9	-2.1	-5.3	2.2	1.7	-1.4	0.3
Price Inflation (RPI) *	0.4	0.2	1.6	1.6	2.3	3.0	2.8
Price Inflation (CPI) *	0.4	-0.1	0.5	0.7	1.7	2.4	1.9
Price Inflation (RPIX) *	0.4	0.2	1.6	1.7	2.4	3.2	2.8
Earnings Inflation **	2.3	6.4	0.9	1.3	1.0	1.7	3.3
All Share Capital Growth	0.8	2.6	-9.0	0.3	1.6	1.1	2.9
Net Dividend Growth	-0.3	-0.1	5.1	3.9	6.8	3.6	-
Earnings Growth	-5.0	-31.7	-36.7	-17.7	-12.3	-4.7	0.7

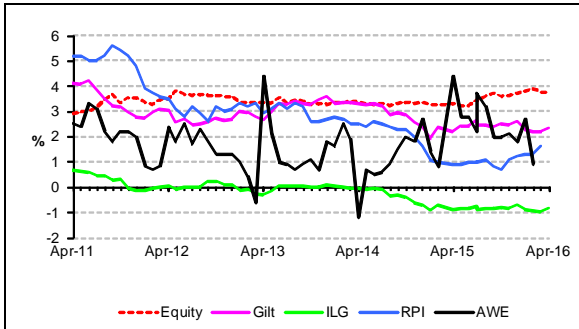
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- 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.

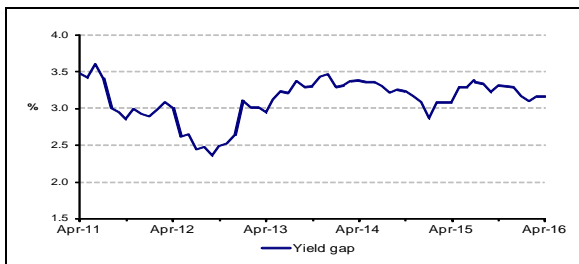


Yields and Yield Gaps

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.

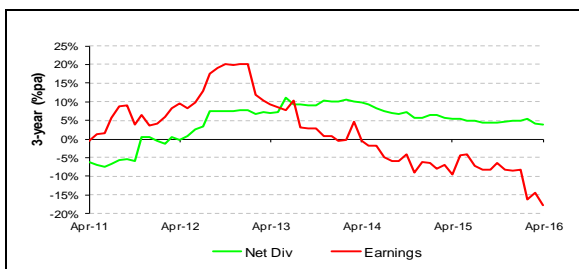
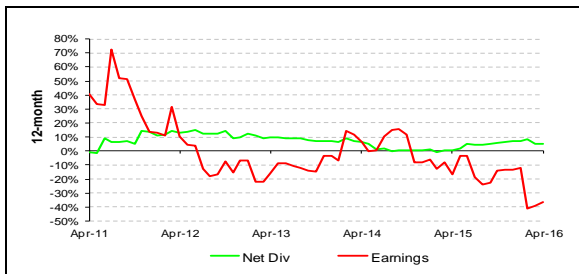


The gap gives a current expectation around 3.2% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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]

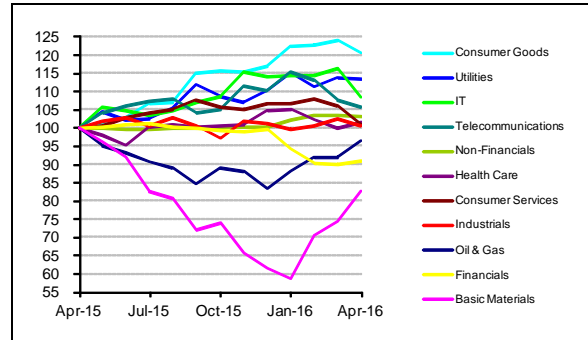
Figure 3: Dividend & Earnings Growth



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

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



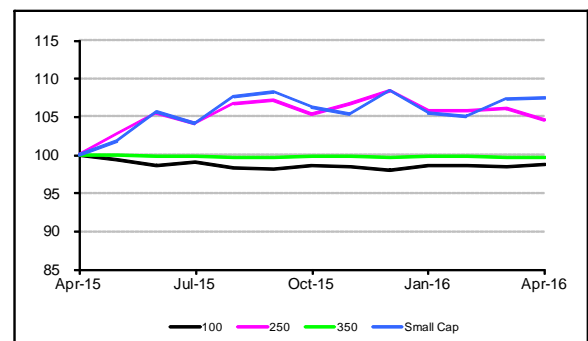
Note: Sector labels for relative lines are in end-value order

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

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	6.1	13.8	-9.1
Basic Materials	12.9	47.2	-22.0
Industrials	-0.6	5.1	-5.0
Consumer Goods	-1.8	2.1	13.5
Health Care	2.8	0.4	-4.2
Consumer Services	-3.5	-1.6	-4.7
Telecommunications	-0.5	-4.8	-0.2
Utilities	0.9	2.3	6.9
Non-Financials	0.8	5.1	-2.6
Financials	2.2	0.5	-14.1
IT	-6.0	-1.6	2.0
All Share	1.1	3.9	-5.7

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



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

FRS17 volatility indicator

Now discontinued, but available on request.



Bond market information

Figure 5: £ Non-Gilt Credit Margins

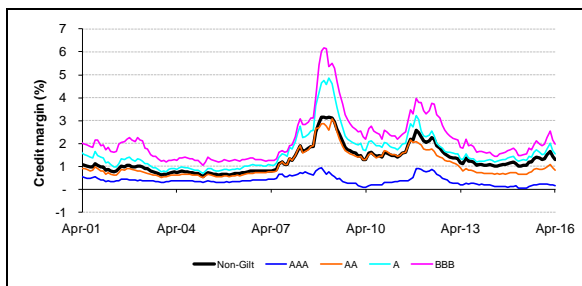


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Nov '15	3.49	2.47	1.02
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

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

Category	Mkt Val @ Apr 16 & 13, 10			Weight (%)
	1,243	1,113	714	
Gilts (39)	1,243	1,113	714	70.0
Non Gilts (1,018)	534	547	465	30.0
AAA (120)	103	127	142	5.8
AA (193)	96	73	72	5.4
A (330)	158	193	160	8.9
BBB (375)	176	154	92	9.9

Category	Mkt Val @ Apr 16 & 13		W't (%)	Dur'n (yrs)
Gilts (39)	1,243	1,113	70.0	10.8
< 5 Yrs (11)	340	317	19.1	2.9
5-15 Yrs (12)	384	373	21.6	7.5
> 15 Yrs (16)	519	424	29.2	18.6
Non Gilts (1,018)	534	547	30.0	7.9
< 5 Yrs (338)	156	143	8.8	2.5
5-15 Yrs (441)	231	224	13.0	7.4
> 15 Yrs (239)	147	180	8.3	14.4

£ Gilt Market “main” Issuance

- £3.16bn 1½% 2021 (2.01x, 0.80%, Mar 16)
 - £2.87bn 1½% 2026 (1.96x, 1.51%, Feb 16)
 - £2.01bn 3½% 2045 (2.08x, 2.35%, Feb 16)
 - £4.75bn 2½% 2065 (**4.48x**, 2.29%, Oct 15)
 - £1.42bn 1/8% IL 2026 (2.00x, ry -0.97%, Feb 16)
- Note: Issuance amounts are nominals.

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (328)	5,805	61.2
Non Sovereigns	3,680	38.8
AAA (665)	1,071	11.3
AA (602)	975	10.3
A (775)	788	8.3
BBB (933)	846	8.9

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (751)	2,037	21.5
3 – 5 Yrs (847)	2,028	21.4
5 – 7 Yrs (764)	1,663	17.5
7 – 10 Yrs (615)	1,764	18.6
10+ Yrs (326)	1,993	21.0

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Apr 16 & 13)		W't (%)	Dur'n (yrs)
Gilts (27)	503	383	93.4	21.6
< 5 Yrs (3)	50	46	9.2	-
5 – 15 Yrs (7)	129	106	24.1	-
> 15 Yrs (17)	323	231	60.1	29.4
Non Gilts (37)	35	32	6.6	16.8

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

Month End	US (%)	Euro (%)	Sterling (%)
Oct '15	6.68	4.52	6.40
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

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

