



Investment Update September 2016

Investment Headlines & Comment

- **Gilt yields** rise from their August lows, triggering capital losses.
- **Sterling** falls again – time to hedge overseas exposure ahead of a rally?
- The Bank of England **Corporate QE** programme has now started.

Feature Section

This month we return to considering the UK and US versions of inflation-protection bonds – see our previous issues in [January 2011](#) and [October 2015](#) for past comment. With UK Index-Linked yields shifting further into negative territory, is there now a greater case for UK investors to invest in US TIPS instead? What risks are there, and how material are they?

We start by updating the datasets involved. Figure 1a shows the movement in yields for ILGs and TIPS, whereas Figure 1b shows the relative inflation, for the UK versus US, together with the movement of the US Dollar versus Sterling, but now with UK CPI included as well (because of some UK liabilities being CPI-based, even though ILGs are still RPI-based). The distortions in the UK market are clear from Figure 1a (negative real yields make no investment sense as there is no "incentive to save"), however US yields are still positive. To put example numbers on it, a 30-year zero coupon inflation-linked bond would currently cost about £167 or \$84 (protecting £100 or \$100 respectively) – paying double in the UK seems nuts (**Ed**: an autumnal technical term). With the US TIPS market currently at c.US\$1,200bn (although there are currently only 8 over 15-year issues) versus the UK's ILG market of £642 billion, it seems UK investors should try to take advantage of the difference in the yields, if they can implement it. The duration of the Over 5 Year UK market is 24.5 years (it only rises to 30.5 years for Over 15 Years) and for the Over 5 Year TIPS market it is 10.5 years (but it rises to 22 years for Over 15 Years, so there are significant market profile differences).

Figure 1a: Long ILG and Long TIPS yields (%)

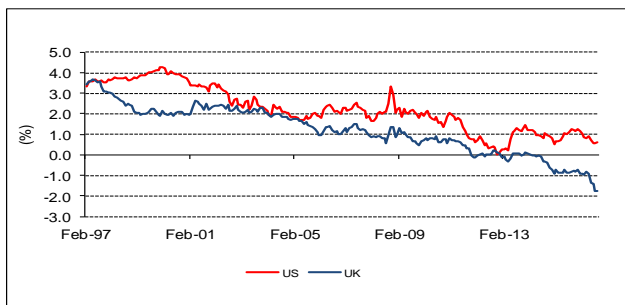
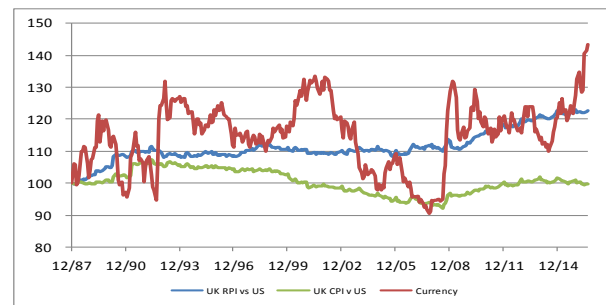


Figure 1b: UK relative to US



Sources: FT, ONS, US Treasury

The latest falls in UK yields has resulted in an annual margin of c. 2.3% for US TIPS versus UK Index-Linked Gilts, but you might reasonably expect a UK investor holding US TIPS to have some of this margin eroded due to differences in actual inflation. The blue line in Figure 1b shows that UK RPI has been ahead of US CPI during two main periods, which were in the late 1980s / early 1990s, and from 2008 to 2013, which were both periods where the UK was experiencing bursts of high inflation (due to low interest rates, increased spending, and rapid growth in the 1980s, and rising oil prices and higher taxes during 2008 to 2013).

Remarkably, for much of the past c. 30 years, UK RPI and US CPI have moved in close parallel for long periods of time (i.e. the distribution of the erosion is "lumpy"). However, US CPI inflation is an unusual beast in that unlike any other CPI index, it *includes* housing costs (by including in the basket of goods the value of shelter to owner-occupants as the amount they forgo by not renting out their homes), so the greater similarity to UK RPI than UK CPI is explicable. Moreover, rolling 12-month UK RPI versus US CPI has been within 0.5% in about 30% of cases over the past c. 30 years, within 1% in 55% of cases, and within 1.5% in 70% of cases. These deviation figures are not "special numbers", but they are all much less than the current 2.3% margin. Annual volatility measures are very period-dependent – that for UK RPI being c.2.1% over the past c. 30 years, versus 1.4% for 12-month US RPI, whereas if you limit to 1993 onwards, the figures are 1.3% and 1.2%, so the probability of a UK inflation burst eroding the margin seems pretty low.

Figure 1b shows large US Dollar versus Sterling currency variation over short-term periods. UK investors would therefore probably look to hedge the currency exposure associated with a US TIPS investment, but with few (if any), Sterling hedged US TIPS pooled funds available, there would be an extra implementation leg for Trustees to think about. However, a segregated government bond portfolio would be a practical alternative to achieve the same result.



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 September 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	1.7	7.8	16.8	6.6	11.0	5.8	6.7
Overseas Equities	1.4	8.5	32.3	14.5	15.8	9.2	7.6
US Equities	0.9	7.0	34.2	19.3	20.6	11.3	7.7
Europe ex UK Equities	1.7	9.1	21.8	8.0	12.5	5.9	9.0
Japan Equities	2.9	12.1	31.3	12.2	11.9	5.1	2.0
Pacific ex Japan Equities	2.3	12.4	38.2	10.7	11.0	10.4	6.6
Emerging Markets	2.2	12.3	36.6	7.4	7.2	8.2	7.1
UK Long-dated Gilts	-4.7	4.2	23.0	16.0	11.0	8.8	9.0
UK Long-dated Corp. Bonds	-3.6	10.1	25.8	13.6	11.4	7.9	-
UK Over 5 Yrs Index-Linked Gilts	-0.8	11.0	27.0	16.0	11.8	9.8	8.9
High Yield (Global)	1.5	8.3	31.6	12.3	12.2	11.6	-
Overseas Bonds	1.7	3.1	28.9	10.2	4.6	8.4	5.8
Property *	-0.2	-2.3	4.2	12.9	9.5	4.1	8.9
Cash	0.0	0.1	0.6	0.6	0.6	1.9	3.6
Commodities £-converted	5.0	-1.4	2.3	-16.2	-9.4	-5.7	-0.9
Hedge Funds original \$ basis *	0.4	2.7	2.8	3.5	3.5	3.7	7.2
Illustrative £-converted version *	1.8	14.2	20.8	9.4	8.1	7.7	8.1
Euro relative to Sterling	1.7	4.1	17.3	1.1	0.1	2.5	-
US \$ relative to Sterling	0.8	2.9	16.6	7.6	3.7	3.7	0.9
Japanese Yen relative to Sterling	3.0	4.3	37.8	6.5	-1.8	5.3	1.4
Sterling trade weighted	-1.6	-3.9	-14.6	-2.5	-0.6	-2.7	-0.4
Price Inflation (RPI) *	0.4	0.9	1.8	1.7	2.3	2.9	2.8
Price Inflation (CPI) *	0.3	0.5	0.6	0.7	1.5	2.3	1.9
Price Inflation (RPIX) *	0.5	1.0	1.9	1.9	2.4	3.1	2.8
Earnings Inflation **	-0.5	-1.3	2.3	2.2	1.8	2.2	3.2
All Share Capital Growth	1.6	6.8	12.6	2.9	7.2	2.1	3.3
Net Dividend Growth	-0.2	1.0	5.0	3.4	6.0	3.4	-
Earnings Growth	8.9	4.4	-38.6	-18.0	-17.0	-6.5	0.3

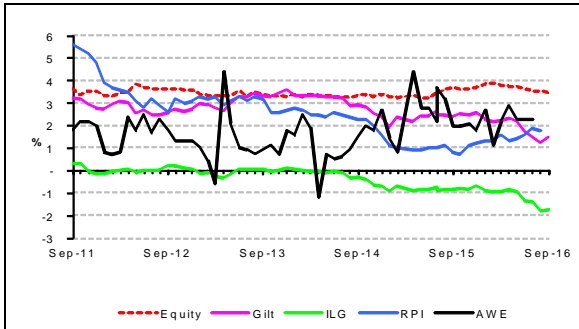
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- 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.

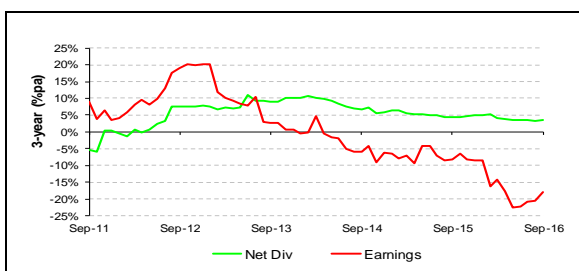
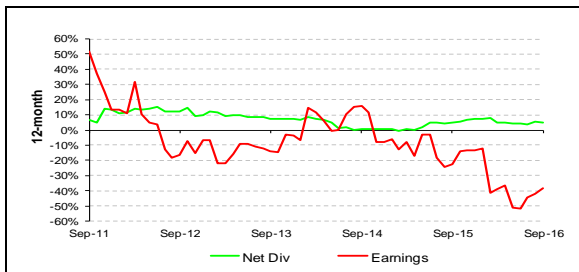


The gap gives a current expectation around 3.2% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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]

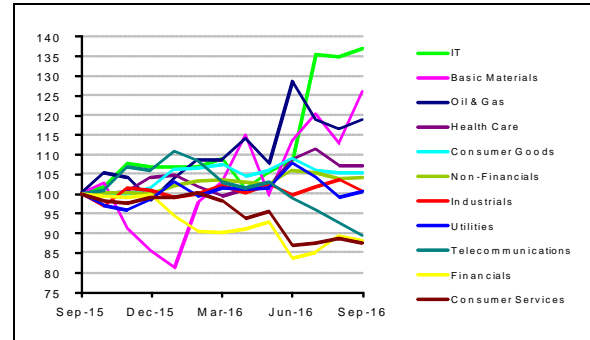
Figure 3: Dividend & Earnings Growth



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



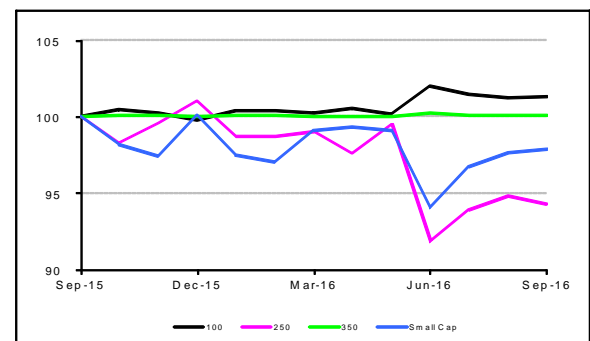
Note: Sector labels for relative lines are in end-value order

There was no change this month in the rolling 12-month sector dispersion (still 49%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	3.8	-0.4	39.0
Basic Materials	13.6	19.7	47.2
Industrials	-1.2	8.8	17.7
Consumer Goods	1.9	4.4	23.3
Health Care	1.7	6.2	25.2
Consumer Services	0.3	8.5	2.2
Telecommunications	-2.2	-2.8	4.2
Utilities	3.2	0.6	17.4
Non-Financials	2.1	6.1	21.8
Financials	0.3	13.7	3.1
IT	3.1	36.1	59.9
All Share	1.7	7.8	16.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid Cap fell slightly in relative terms this month, whilst Large and Small Cap rose very slightly 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

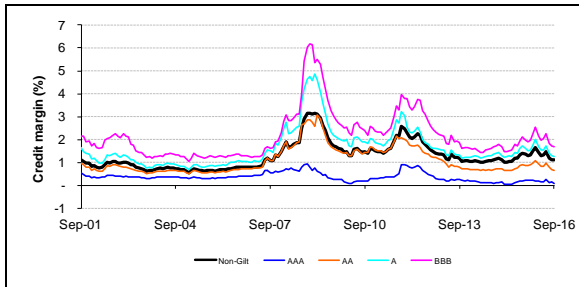


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Apr '16	3.28	2.34	0.94
May '16	3.13	2.18	0.95
Jun '16	2.73	1.72	1.01
Jul '16	2.29	1.50	0.79
Aug '16	1.95	1.24	0.71
Sep '16	2.21	1.46	0.75

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

Category	Mkt Val @ Sep 16 & 13, 10			Weight (%)
	Sep 16	Sep 13	Sep 10	
Gilts (39)	1,401	1,090	816	70.8
Non Gilts (1,018)	579	520	489	29.2
AAA (121)	110	106	147	5.6
AA (180)	97	84	75	4.9
A (345)	180	167	171	9.1
BBB (372)	192	163	96	9.7

Category	Mkt Val @ Sep 16 & 13		W't (%)	Dur'n (yrs)
Gilts (39)	1,401	1,090	70.8	11.7
< 5 Yrs (11)	379	333	19.1	2.8
5-15 Yrs (12)	387	351	19.6	7.6
> 15 Yrs (16)	635	406	32.1	19.6
Non Gilts (1,018)	579	520	29.2	8.4
< 5 Yrs (341)	164	149	8.3	2.6
5-15 Yrs (439)	244	209	12.3	7.6
> 15 Yrs (238)	170	162	8.6	15.3

£ Gilt Market “main” Issuance

- o £3.15bn ½% 2022 (2.33x, 0.37%, Aug 16)
 - o £2.87bn 1½% 2026 (1.73x, 0.69%, Jul 16)
 - o £2.87bn 1½% 2047 (1.92x, 1.53%, new)
 - o £0.80bn 1/8% IL 2046 (1.57x, ry -1.60%, May 16)
 - o £0.40bn 1/4% IL 2052 (3.12x, ry -1.77%, Sep 14)
- Note: Issuance amounts are nominals.

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (326)	6,031	60.9
Non Sovereigns	3,880	39.1
AAA (681)	1,081	10.9
AA (631)	1,057	10.7
A (819)	839	8.5
BBB (994)	902	9.1

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (768)	2,036	20.5
3 – 5 Yrs (871)	2,083	21.0
5 – 7 Yrs (789)	1,716	17.3
7 – 10 Yrs (660)	1,871	18.9
10+ Yrs (363)	2,207	22.3

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Sep 16 & 13)		W't (%)	Dur'n (yrs)
Gilts (27)	642	373	93.9	23.4
< 5 Yrs (3)	51	44	7.4	-
5 – 15 Yrs (7)	146	103	21.3	-
> 15 Yrs (17)	446	225	65.2	30.5
Non Gilts (36)	42	31	6.1	17.5

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

Month End	US (%)	Euro (%)	Sterling (%)
Apr '16	6.41	4.00	6.51
May '16	6.41	3.99	6.45
Jun '16	6.36	4.13	6.79
Jul '16	6.01	3.72	6.27
Aug '16	5.68	3.47	5.87
Sep '16	5.63	3.57	5.97

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

