JAGGER & ASSOCIATES

Investment Update
October 2019

Investment Headlines & Comment

- Sterling performed strongly this month, back up to levels seen around the first Brexit date.
- The closure of Woodford Investment Management is not a "star manager" reminder.
- Instead the issue seems to be that the manager changed their approach and the risks grew.

Feature Section

This month we consider an ongoing anomaly in Liability Driven Investment (LDI). It follows on from our March 2010 item where we looked at inflation swaps. If a pension scheme is implementing LDI, whether directly or through the use of pooled funds, at some point there will be a decision on whether to use gilts or derivatives (with associated counterparties) to achieve the desired exposure.

The difference between the yield on a Gilt and the yield on a swap of the same maturity is called the z-spread. In conventional finance theory, a swap should have a *higher* yield than a Gilt of similar maturity as the swap will be exposed to counterparty risk. This applied in the pre-credit-crunch period, with swap yields being about 0.3%-0.4% higher than gilt yields – it was no coincidence that this margin was close to the credit margin on (then) AA-rated banks, as they were the providers of the swaps.

However, we do not live in conventional times. A positive z-spread means that Gilt yields are (anomalously) higher than swap yields, and at the longer end of the market this has applied since 2008 - the shift appears to have corresponded with the ending of the "credit crunch". So, pooled funds using Gilts rather than swaps should currently offer more attractive yields and will be of most interest to Trustees, excluding other factors such as differing transaction costs. In any event, those costs tend to be much higher on long-dated swaps.

Figure 1a: 2012 to 2015

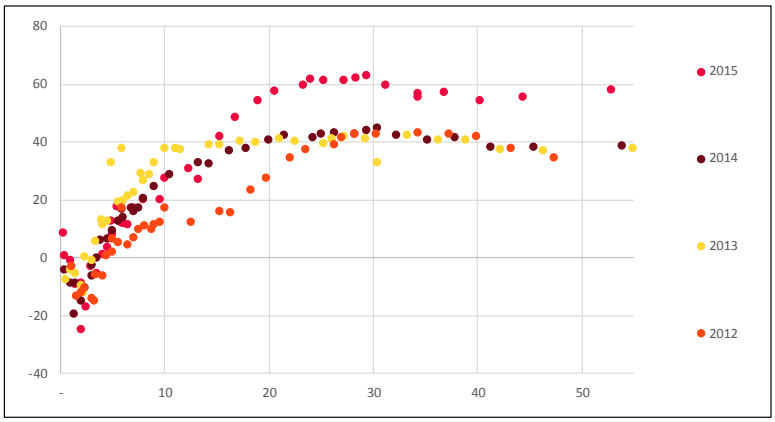
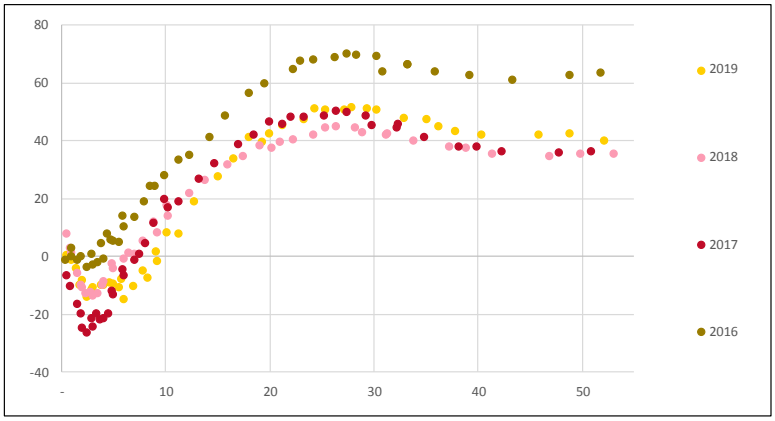


Figure 1b: 2016 to 2019



Figures 1a and 1b show the z-spread curve for the gilt market at the end of each September from 2012 through to 2019 (the data is courtesy of BlackRock). The charts plot the z-spread in basis points (units of 0.01%) versus term to maturity. The reason for using two charts is just to see the data patterns more clearly – the axes are the same for both.

It is interesting to note how each curve largely flattens out beyond about 20 years to maturity, although the end level of the curve has varied over time.

Now, given the levels that ultra-long gilt yields have reached intra-month recently (c.0.8%), that implies that the absolute value of some swap yields will have been getting down to around 0.4%. So, those wishing to use swaps will have been saying they wish to lock into those minimal yields in return for paying (unknown) cash rates for the next 30+ years … is that truly extraordinary or are we missing something here?!

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 October 2019

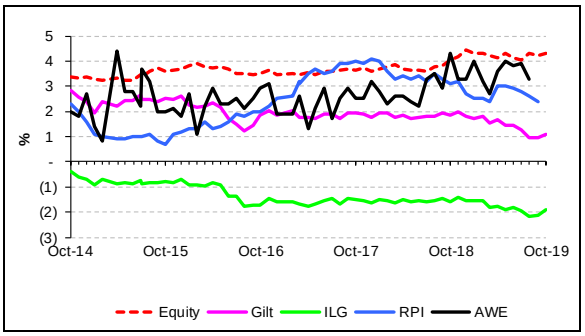
Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)	20 years (% p.a.)
UK Equities	-1.4	-2.1	6.8	6.1	6.6	8.3	5.1
Overseas Equities	-2.1	-2.8	12.0	10.0	12.8	12.4	6.9
US Equities	-2.7	-3.2	12.9	**12.7**	**15.5**	**16.4**	6.3
Europe ex UK Equities	-1.4	-1.8	12.2	8.4	9.9	8.3	7.5
Japan Equities	-0.1	2.3	7.6	5.6	12.2	9.3	3.2
Pacific ex Japan Equities	-1.0	-4.1	12.6	6.2	9.0	8.8	**9.4**
Emerging Markets	-0.7	**-4.3**	10.9	5.7	7.8	6.7	9.1
UK Long-dated Gilts	-3.1	**4.2**	**17.8**	6.6	9.3	8.7	6.9
UK Long-dated Corp. Bonds	-1.0	3.1	17.5	6.7	8.4	8.6	7.2
UK Over 5 Yrs Index-Linked Gilts	**-5.9**	-1.5	9.8	3.4	8.9	8.8	7.4
High Yield (Global)	-3.9	**-4.3**	7.3	3.9	9.3	9.9	8.3
Overseas Bonds	-4.5	-3.8	8.7	**0.3**	6.7	4.5	5.6
Property *	**0.2**	0.6	2.9	7.7	8.2	10.1	8.0
Cash	0.1	0.2	**0.8**	0.6	**0.6**	**0.6**	**2.7**
Commodities £-converted	-3.6	-8.0	-11.1	0.5	-6.5	-3.5	0.9
Hedge Funds original $ basis *	-0.1	-0.4	0.4	3.8	2.9	4.0	5.8
Illustrative £-converted version *	-1.3	2.8	6.2	5.6	8.7	6.7	7.3
Euro relative to Sterling	-2.5	-5.2	-2.8	-1.3	1.9	-0.4	1.5
US $ relative to Sterling	-4.8	-5.4	-1.3	-1.9	4.3	2.4	1.2
Japanese Yen relative to Sterling	-4.8	-5.0	3.1	-2.8	5.1	0.6	1.0
Sterling trade weighted	3.4	5.9	2.1	2.3	-2.0	-0.2	-1.2
Price Inflation (RPI) *	-0.2	0.5	2.4	3.2	2.5	3.1	2.8
Price Inflation (CPI) *	0.1	0.6	1.8	2.4	1.6	2.2	2.0
Price Inflation (RPIX) *	-0.2	0.5	2.4	3.2	2.5	3.1	2.9
Earnings Inflation **	-1.2	-0.6	3.3	3.1	2.9	2.2	3.0
All Share Capital Growth	-1.7	-3.4	2.3	2.0	2.7	4.4	1.6
Dividend Growth	0.2	2.1	8.6	8.9	7.7	6.9	4.7
Earnings Growth	-1.6	2.6	-23.3	27.6	0.8	5.6	4.1

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

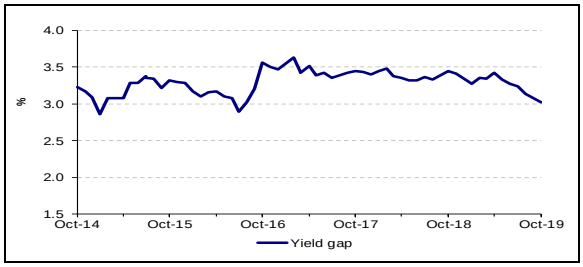
- *UK Equities (incl. dividends and earnings) – FT-A All Share.*
- *Overseas Equities (incl. regions) – blend of FT All-World / World sub-indices*
- *Emerging Markets from MSCI US $ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment 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 – MSCI IPD UK Monthly Property 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.

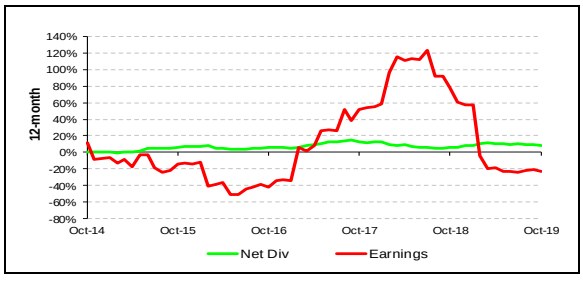


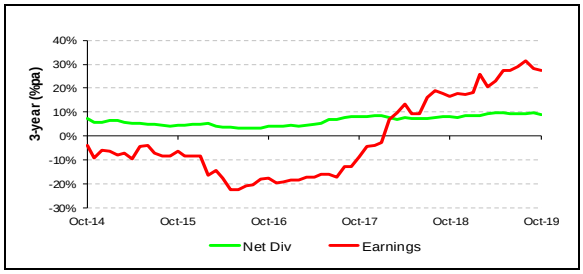
The gap gives a current expectation around 3.0% for longer-term inflation *including the risk premium for gilts, relative to index-linked gilts.*

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

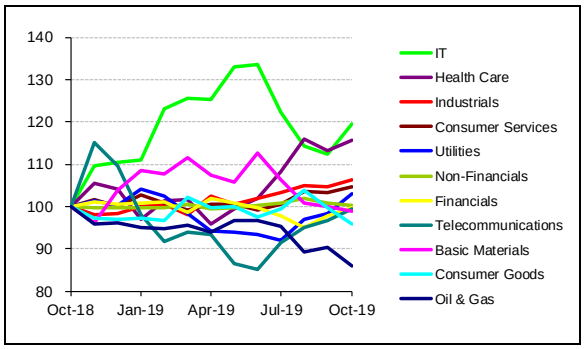




Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



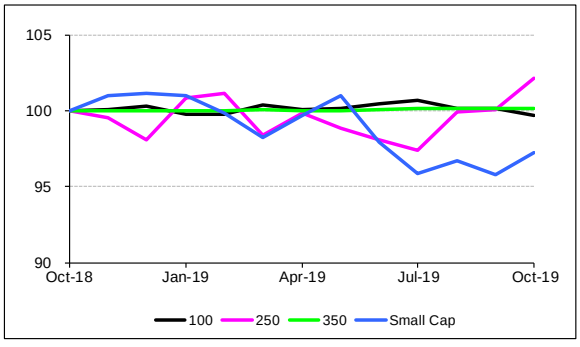
Note: Sector labels for relative lines are in end-value order

There was a rise this month in the rolling 12-month sector dispersion (from 27% to 34%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	-6.3	-11.6	-8.3
Basic Materials	-2.7	-9.2	5.4
Industrials	0.3	0.9	13.6
Consumer Goods	-5.2	-5.6	2.3
Health Care	0.7	4.6	23.4
Consumer Services	-0.2	1.8	11.6
Telecommunications	1.6	6.4	6.3
Utilities	3.2	9.6	9.9
Non-Financials	-2.0	-2.8	6.9
Financials	0.4	-0.2	6.4
IT	4.9	-4.3	27.7
All Share	-1.4	-2.1	6.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid Cap and Small Cap both rose in relative terms this month.

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

Bond market information

Figure 5: £ Non-Gilt Credit Margins

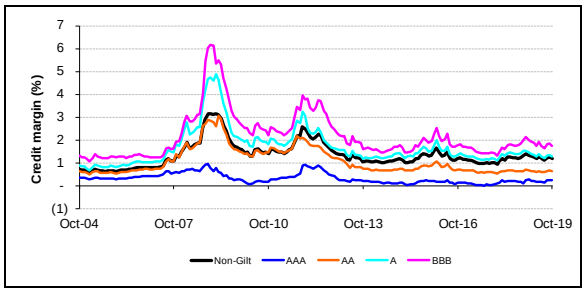


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
May '19	2.30	1.44	0.86
Jun '19	2.24	1.44	0.80
Jul '19	2.08	1.27	0.81
Aug '19	1.80	0.97	0.83
Sept '19	1.80	0.95	0.85
Oct '19	**1.91**	**1.10**	**0.81**

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

Category	Mkt Val @ Oct 19 & 16, 13			Weight (%)
Gilts (42)	1,404	1,322	1,067	68.7
Non Gilts (1,148)	640	561	529	31.3
AAA (156)	132	110	106	6.4
AA (170)	87	94	86	4.3
A (352)	180	173	169	8.8
BBB (470)	241	185	168	11.8

Category	Mkt Val (£bn @ Oct 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (42)	1,404	1,322	68.7	13.2
< 5 Yrs (10)	311	377	15.2	2.8
5–15 Yrs (12)	398	348	19.5	8.1
> 15 Yrs (20)	694	596	34.0	20.8
Non Gilts (1,148)	640	561	31.3	7.9
< 5 Yrs (409)	211	167	10.3	2.6
5–15 Yrs (508)	277	233	13.5	7.4
> 15 Yrs (231)	153	162	7.5	16.2

Tables 2d, 2e: € Market Size and Maturity (Oct 19)

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (365)	6,791	58.7
Non Sovereigns	4,774	41.3
AAA (949)	1,300	11.2
AA (760)	1,180	10.2
A (1,121)	1,033	8.9
BBB (1,505)	1,262	10.9

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (1,156)	2,486	21.5
3 – 5 Yrs (1,246)	2,373	20.5
5 – 7 Yrs (935)	1,873	16.2
7 – 10 Yrs (816)	1,984	17.2
10+ Yrs (547)	2,849	24.6

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Oct 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (30)	760	639	100.0	21.7
< 5 Yrs (5)	104	51	13.7	2.8
5 – 15 Yrs (7)	156	145	20.5	10.1
> 15 Yrs (18)	500	443	65.8	29.2

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

Month End	US (%)	Euro (%)	Sterling (%)
May '19	6.25	3.69	5.71
Jun '19	5.68	3.27	5.51
Jul '19	5.66	3.22	5.57
Aug '19	5.60	3.10	5.52
Sept '19	5.49	3.11	5.48
Oct '19	**5.54**	**3.17**	**5.38**

Sources: DMO, FTSE, iBoxx, J&A, MLX

£ Gilt Market "main" Issuance

- £3.45bn, $^{5}/_{8}$% 2025 (2.28x, 0.54%, 15%, Sept 19)
- £3.16bn, $^{7}/_{8}$% 2029 (1.87x, 0.63%, 15%, Sept 19)
- £2.25bn, 1¾% 2037 (1.89x, 0.94%, 0%, Jul 19)
- £1.10bn IL$^{1}/_{8}$% 2028 (2.61x, ry -2.48%, 0%, Aug 19)
- £0.92bn IL$^{1}/_{8}$% 2036 (2.03x, ry -2.57%, 15%, Apr 19)

Note: Issuance amounts are nominals. The first % figure in each row is the yield or real yield. The second % figure is the additional amount taken up under the Post Auction Option Facility (PAOF), as a % of the amount of the issue. PAOF does not apply for syndication cases.

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