JAGGER & ASSOCIATES

Investment Update
February 2019

Investment Headlines & Comment

- Most equity markets continued to recover from their Q4 falls.
- Nominal gilt yields rose slightly, but ILG real yields were static.
- Sterling's trade weighted index level rose above 80 this month.

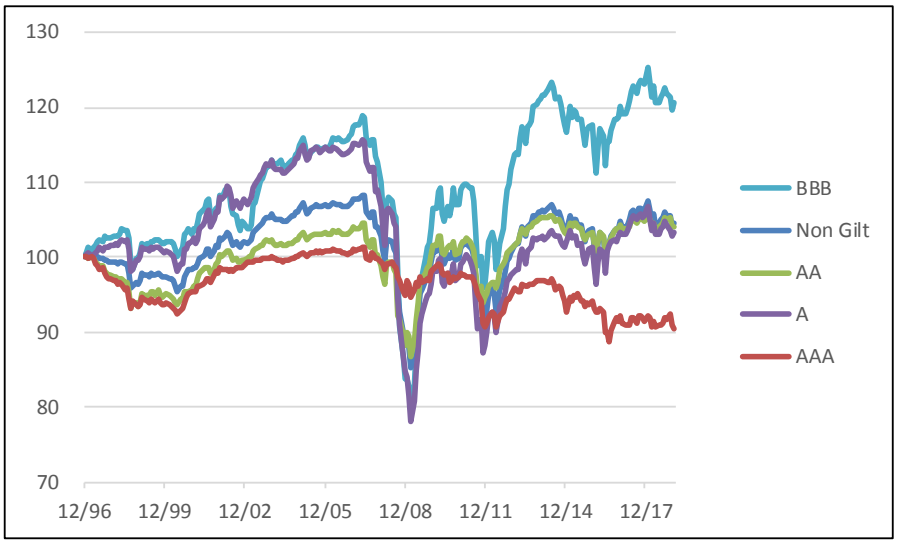
Feature Section

This month we consider the trade-off between the additional credit margin available on investment grade corporate bonds and their now generally shorter duration (weighted average term), relative to UK government bonds.

In the mid 1990s, which was the early days of the sterling corporate bond market, the two markets' durations were pretty similar at around 7 years, but over the ensuing couple of decades, Table 2c on page 4 shows that the gilt market duration has increased markedly whereas the corporate bond market duration has hardly moved. Consequently, the capital gains from interest rate curves falling (particularly at the longer end) has had a far greater effect on returns for gilts than for corporate bonds.

Figure 1 shows the *cumulative* relative returns for the iBoxx Non-Gilts index relative to all-dated Gilts (effectively keeping Gilts at a constant notional level of 100), and it also shows the outputs for the underlying credit rating bands within the iBoxx index. (The data starts in late 1996 to reflect when the Barclays Capital index started, which later got absorbed in the iBoxx index.)

Figure 1: Cumulative Relative Returns



Sources: Barclays Capital, iBoxx

In the first ("pre credit crunch") decade, things behaved as might have been expected, with the Non-Gilt index adding a little under 1% p.a. but then came the banking crisis – refer to Figure 5 on p4 for a reminder of how pronounced (albeit fairly short-lived) the spike in yields was.

Since then, there have been further periods of concern, such as the Eurozone crisis in 2011, which caused a second temporary relative drop.

The striking thing is that over the period shown, all-dated corporate bonds have outperformed all-dated gilts but only by 0.2% p.a. – the majority of the credit margin has been offset by the drop in gilt yields. However, investors can take consolation that the prospective relative return on corporate bonds is rather better, simply because of the prospective scale of future gilt issuance putting upward pressure on yields. For example, a quarter of the Gilt market matures in the next 5 years and will have to be reissued; there is an ongoing Budget deficit to finance; the Quantitative Easing portfolio may well be unwound at some point; and there is the possibility of a surge in Government spending if Mr Corbyn gets elected. LDI advocates claim that pension scheme demand will offset this risk of rising yields, but this may rather rely on the madness of crowds.

Incidentally, in the mid 1990s, the corporate bond market was about a third of the size of the gilt market, but by the early 2000s they were of comparable size (just over £200bn each). As Table 2b on page 4 shows, whilst the corporate bond market has expanded somewhat (e.g. initially due to FRS17, and then due to demand from increased pension scheme maturity), its expansion has been completely dwarfed by that of the gilt market.

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 28 February 2019

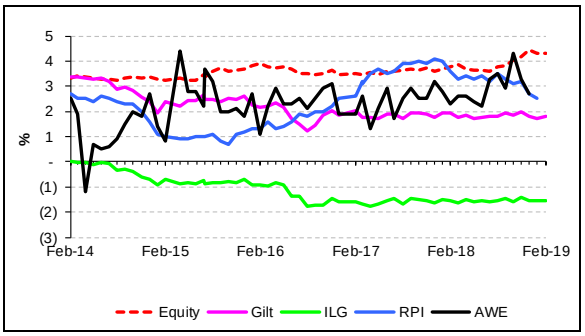
Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)	20 years (% p.a.)
UK Equities	**2.3**	2.6	1.7	9.2	5.0	11.2	5.1
Overseas Equities	1.5	-1.4	3.0	15.6	12.5	14.5	7.0
US Equities	2.2	-2.5	**8.4**	**17.3**	**15.7**	**17.4**	5.9
Europe ex UK Equities	1.9	0.5	-3.1	11.9	6.8	11.3	7.2
Japan Equities	-1.1	**-5.2**	**-7.0**	11.9	11.0	9.3	4.8
Pacific ex Japan Equities	1.1	2.2	-3.8	16.4	10.5	13.6	10.0
Emerging Markets	-0.9	1.9	-6.3	**17.3**	9.5	11.5	**10.5**
UK Long-dated Gilts	-1.7	5.1	3.2	4.5	8.5	7.9	6.2
UK Long-dated Corp. Bonds	-0.4	**6.5**	1.7	7.2	7.2	9.1	6.4
UK Over 5 Yrs Index-Linked Gilts	-0.9	2.5	1.9	7.2	8.9	9.1	6.9
High Yield (Global)	0.4	0.3	5.8	11.1	8.7	12.3	7.8
Overseas Bonds	**-2.0**	-1.6	2.7	2.8	5.4	3.1	5.0
Property *	0.2	0.8	6.9	6.9	10.6	9.4	8.4
Cash	0.1	0.2	0.8	**0.5**	**0.6**	**0.7**	**2.8**
Commodities £-converted	2.7	0.1	1.0	9.0	-8.7	-2.4	2.4
Hedge Funds original $ basis *	3.5	0.5	-3.6	5.1	2.9	5.3	6.2
Illustrative £-converted version *	0.2	-2.4	4.2	7.7	7.6	6.3	7.4
Euro relative to Sterling	-1.9	-3.5	-3.3	3.2	0.8	-0.4	1.1
US $ relative to Sterling	-1.1	-4.1	3.6	1.6	4.7	0.7	0.9
Japanese Yen relative to Sterling	-3.3	-2.2	-0.7	2.0	2.9	-0.6	1.3
Sterling trade weighted	1.8	3.6	2.2	-1.8	-1.4	0.2	-0.9
Price Inflation (RPI) *	-0.9	-0.5	2.5	3.0	2.3	3.0	2.8
Price Inflation (CPI) *	-0.7	-0.4	1.8	2.2	1.4	2.3	2.0
Price Inflation (RPIX) *	-0.9	-0.5	2.5	3.1	2.4	3.2	2.8
Earnings Inflation **	2.8	3.1	2.7	2.6	2.4	1.9	2.9
All Share Capital Growth	1.7	1.7	-2.3	5.1	1.2	7.3	1.6
Dividend Growth	1.7	4.9	10.8	8.5	6.6	4.9	4.6
Earnings Growth	-18.4	-17.2	-4.6	25.9	0.4	0.8	3.9

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

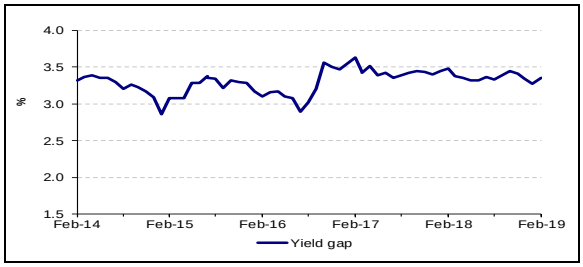
- *UK Equities (incl. dividends and earnings) – FT-A All Share.*
- *Overseas Equities (incl. regions) – blend of FT All-World / World subindices*
- *Emerging Markets from MSCI US $ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment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

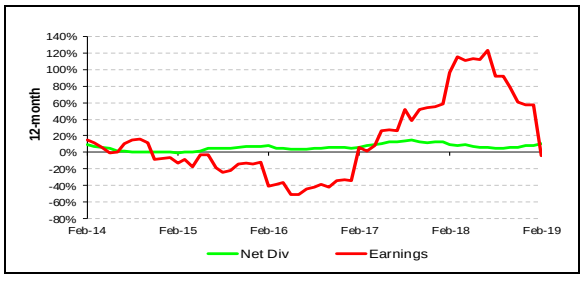


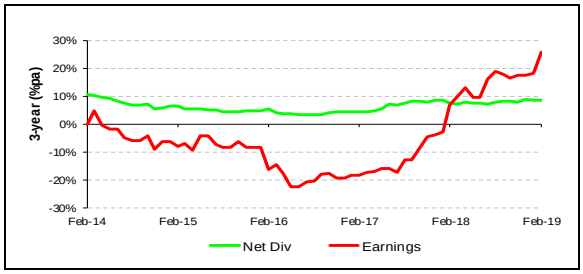
The gap gives a current expectation around 3.4% for longer-term inflation *including the risk premium for gilts, relative to index-linked gilts.*

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

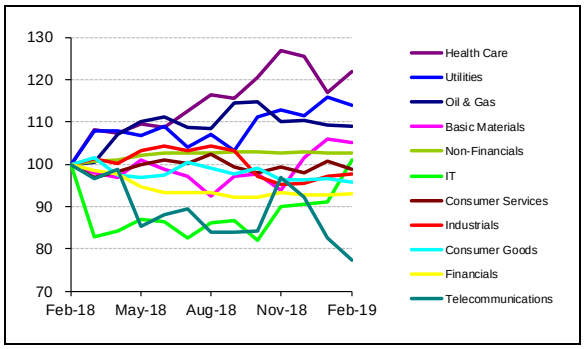




Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



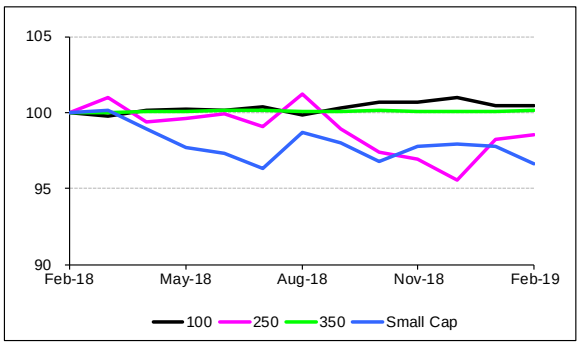
Note: Sector labels for relative lines are in end-value order

There was a small rise this month in the rolling 12-month sector dispersion (from 41% to 45%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	2.0	1.5	10.7
Basic Materials	1.6	15.0	7.0
Industrials	3.0	5.2	-0.6
Consumer Goods	1.7	2.1	-2.5
Health Care	6.8	-1.4	24.0
Consumer Services	0.4	1.9	0.5
Telecommunications	-4.2	-18.3	-21.5
Utilities	0.5	3.7	15.9
Non-Financials	2.2	2.6	4.4
Financials	2.6	2.4	-5.3
IT	13.4	15.1	2.6
All Share	2.3	2.6	1.7

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



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

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

Bond market information

Figure 5: £ Non-Gilt Credit Margins

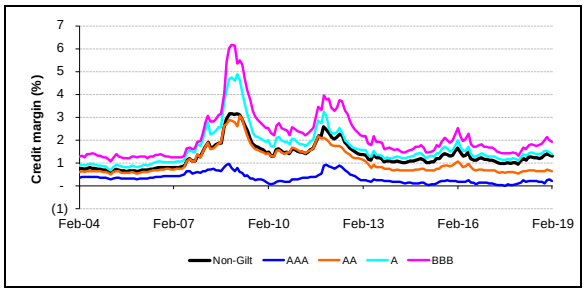


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Sep '18	2.79	1.93	0.86
Oct '18	2.74	1.86	0.88
Nov '18	2.96	2.00	0.96
Dec '18	2.75	1.81	0.94
Jan '19	2.55	1.71	0.84
Feb '19	**2.61**	**1.80**	**0.81**

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

Category	Mkt Val @ Feb 19 & 16, 13			Weight (%)
Gilts (42)	1,334	1,259	1,110	70.0
Non Gilts (1,086)	571	523	529	30.0
AAA (145)	115	101	127	6.0
AA (166)	82	95	72	4.3
A (323)	155	154	180	8.1
BBB (452)	219	174	150	11.5

Category	Mkt Val (£bn @ Feb 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (42)	1,334	1,259	70.0	11.9
< 5 Yrs (11)	350	342	18.4	2.6
5–15 Yrs (11)	355	391	18.6	7.6
> 15 Yrs (20)	629	526	33.0	19.6
Non Gilts (1,086)	571	523	30.0	7.8
< 5 Yrs (396)	198	154	10.4	2.8
5–15 Yrs (459)	233	228	12.3	7.5
> 15 Yrs (231)	139	142	7.3	15.3

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (361)	6,269	59.2
Non Sovereigns	4,322	40.8
AAA (899)	1,218	11.5
AA (722)	1,085	10.2
A (1,006)	923	8.7
BBB (1,325)	1,096	10.3

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (1,042)	2,372	22.4
3 – 5 Yrs (1,144)	2,252	21.3
5 – 7 Yrs (886)	1,727	16.3
7 – 10 Yrs (783)	1,895	17.9
10+ Yrs (458)	2,344	22.1

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Feb 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (30)	678	507	100.0	21.7
< 5 Yrs (3)	59	50	8.6	2.2
5 – 15 Yrs (8)	160	129	23.5	8.5
> 15 Yrs (19)	460	328	67.8	28.8

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

Month End	US (%)	Euro (%)	Sterling (%)
Sep '18	6.02	3.58	5.78
Oct '18	6.45	3.91	5.84
Nov '18	6.71	4.37	6.37
Dec '18	7.26	4.46	6.77
Jan '19	6.42	4.05	6.36
Feb '19	**6.15**	**3.76**	**6.02**

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

£ Gilt Market "main" Issuance

- £2.59bn, $1\frac{5}{8}$% 2028 (2.06x, 1.16%, 15%, Jan '19)
- £1.69bn, 1¾% 2057 (2.25x, 1.63%, 13%, Jul '18)
- £1.25bn IL $\frac{1}{8}$% 2028 (2.25x, ry -1.99%, 14%, Oct '18)
- £2.50bn IL $\frac{1}{8}$% 2041 (7.80x, ry -1.68%, n/a, Jul '18)

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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