$\mathbf{J}_{\mathrm{AGGER}}$ & $\mathbf{A}_{\mathrm{SSOCIATES}}$

Investment Update

March 2019

Investment Headlines & Comment

- Another volatile month for **gilts** However, no sign of **expected** with a new intra-month record low for long-dated real yields.
 - inflation rising significantly, so not an economic-led move?
- This view is supported by there being no post-auction take-up for ILG 2048 (see p4).

This month we return to the subject of Eurozone bond yields, which we last **Feature Section** looked at in our November 2016 edition. The return is prompted by German 10year government bond yields having moved into negative territory, last seen for a short while in mid 2016.

Figure 1a plots the history of some Euro member countries' 10-year yields, as a reminder of the convergence process that took place in the mid 1990s, and the subsequent decade-long synchronization, before instability set in. Figure 1b then plots the yields relative to those on German 10-year government bonds.

Figure 1a: Absolute 10-year yields

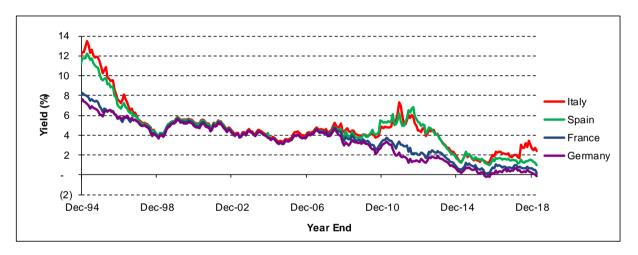
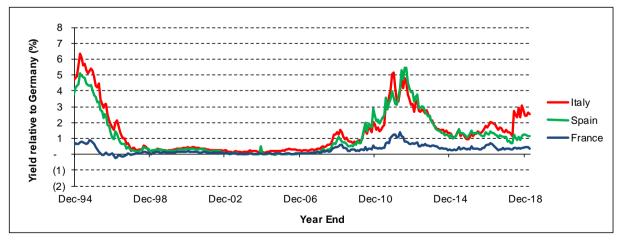


Figure 1b: "Relative to Germany" 10-year yields



Source: FT

From Figure 1b, it is clear that the Italian-German yield divergence is not yet at the levels seen during the Eurozone crisis in late 2011, but it does once again prompt the question of just how the Euro really can continue to survive. The relative position is equally striking for those bonds out at 30-year maturity – as of the end of March 2019, a German yield of 0.55% p.a. but an Italian one of 3.45%.

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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 <u>cannot</u> 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 March 2019

Asset Class	1 month	3 months	12 months	3 years	5 years	10 years	20 years
	(%)	(%)	(%)	(% p.a.)	(% p.a.)	(% p.a.)	(% p.a.)
UK Equities	2.7	9.4	6.4	9.5	6.1	11.1	5.1
Overseas Equities	3.5	9.6	10.9	15.2	12.9	13.9	7.0
US Equities	4.0	11.2	17.7	17.4	16.4	17.0	6.1
Europe ex UK Equities	2.6	8.0	2.8	11.3	7.2	10.6	7.2
Japan Equities	2.8	4.5	-0.9	12.3	11.7	9.4	4.3
Pacific ex Japan Equities	3.7	8.6	4.0	14.7	10.8	12.6	9.8
Emerging Markets	2.9	7.5	0.2	14.8	9.3	10.4	10.1
UK Long-dated Gilts	5.5	6.0	4.7	6.3	9.7	8.1	6.5
UK Long-dated Corp. Bonds	4.5	7.8	4.9	7.3	8.2	9.5	6.6
UK Over 5 Yrs Index-Linked Gilts	6.5	6.3	5.7	9.1	9.9	9.3	7.1
High Yield (Global)	2.8	4.1	11.1	11.4	9.2	12.3	7.9
Overseas Bonds	3.5	-0.8	6.8	4.3	6.1	3.3	5.2
Property *	0.1	0.6	6.3	6.7	10.4	9.7	8.4
Cash	0.1	0.2	0.8	0.6	0.6	0.7	2.8
Commodities £-converted	3.7	12.4	4.4	9.7	-8.2	-2.5	1.8
Hedge Funds original \$ basis *	1.4	2.2	-0.6	5.5	2.8	5.6	6.3
Illustrative £-converted version *	0.2	-1.9	3.0	7.2	7.7	6.3	7.3
Euro relative to Sterling	0.7	-4.0	-1.7	2.8	0.8	-0.7	1.3
US \$ relative to Sterling	2.1	-2.3	7.7	3.3	5.0	1.0	1.1
Japanese Yen relative to Sterling	2.7	-3.1	3.4	3.9	3.5	-0.2	1.5
Sterling trade weighted	-1.1	3.1	-0.4	-2.5	-1.6	0.3	-1.1
Price Inflation (RPI) *	0.7	0.1	2.5	3.1	2.3	3.0	2.8
Price Inflation (CPI) *	0.5	-0.2	1.8	2.3	1.4	2.2	2.0
Price Inflation (RPIX) *	0.7	0.1	2.4	3.2	2.4	3.1	2.9
Earnings Inflation **	-0.1	2.3	3.7	2.7	2.4	1.9	3.0
All Share Capital Growth	2.3	8.3	2.2	5.4	2.3	7.2	1.6
Dividend Growth	0.6	2.4	12.0	9.5	6.7	5.2	4.6
Earnings Growth	-6.4	-22.2	-19.5	20.5	-0.4	0.8	3.6

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

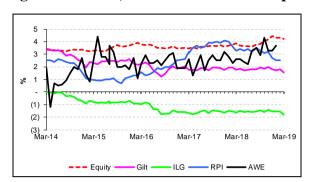
- UK Equities (incl. dividends and earnings) FT-A All Share.
- Overseas Equities (incl. regions) blend of FT All-World / World subindices
- Emerging Markets from MSCI US \$ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment restrictions),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

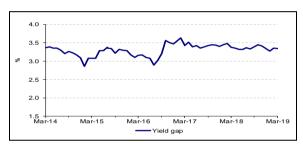
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Yields and Yield Gaps

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.

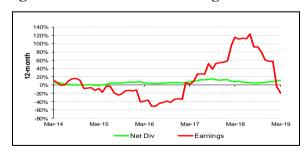


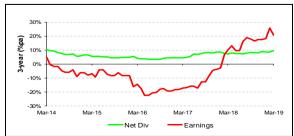
The gap gives a current expectation around 3.3% for longer-term inflation *including the risk premium for gilts, relative to index-linked gilts.*

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

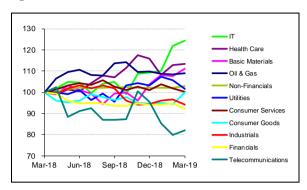




Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



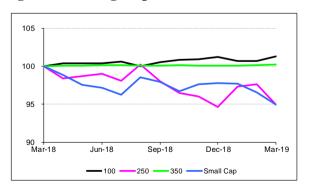
Note: Sector labels for relative lines are in end-value order

There was a small fall this month in the rolling 12-month sector dispersion (from 45% to 42%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	3.3	8.8	15.9
Basic Materials	6.2	17.5	18.3
Industrials	0.0	9.2	0.0
Consumer Goods	8.5	15.2	6.1
Health Care	3.0	6.9	20.4
Consumer Services	0.9	8.5	6.5
Telecommunications	5.2	-6.1	-12.9
Utilities	-1.4	7.5	7.8
Non-Financials	3.6	10.2	9.5
Financials	0.1	7.1	-2.0
IT	4.7	24.5	32.2
All Share	2.7	9.4	6.4

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



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

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

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Bond market information

Figure 5: £ Non-Gilt Credit Margins

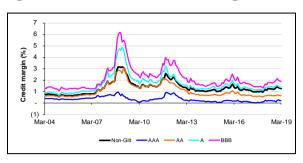


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
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
Mar '19	2.34	1.54	0.80

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

Category	Mkt Val			Weight
	@ Mar 19 & 16, 13			(%)
Gilts (42)	1,376	1,253	1,130	70.1
Non Gilts (1,094)	588	534	534	29.9
AAA (151)	121	104	127	6.2
AA (166)	84	97	71	4.3
A (323)	158	157	186	8.1
BBB (454)	225	177	151	11.4

Category	Mkt Val (£bn @ Mar 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (42)	1,376	1,253	70.1	12.2
< 5 Yrs (11)	348	337	17.7	2.5
5–15 Yrs (11)	364	388	18.5	7.6
> 15 Yrs (20)	664	528	33.8	19.9
Non Gilts (1,094)	588	534	29.9	7.9
< 5 Yrs (401)	202	156	10.3	2.8
5–15 Yrs (462)	242	231	12.3	7.5
> 15 Yrs (231)	144	148	7.3	15.6

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (365)	6,393	59.0
Non Sovereigns	4,444	41.0
AAA (922)	1,265	11.7
AA (735)	1,118	10.3
A (1,008)	934	8.6
BBB (1,345)	1,126	10.4

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (1,058)	2,365	21.8
3 – 5 Yrs (1,160)	2,317	21.4
5 – 7 Yrs (896)	1,738	16.0
7 – 10 Yrs (797)	1,979	18.3
10+ Yrs (464)	2,437	22.5

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Mar 19 & 16)		W't (%)	Dur'n (yrs)
Gilts (30)	720	513	100.0	22.2
< 5 Yrs (4)	79	50	11.0	2.8
5 – 15 Yrs (8)	170	129	23.7	9.8
> 15 Yrs (18)	470	334	65.3	29.9

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

Month	US	Euro	Sterling
End	(%)	(%)	(%)
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
Mar '19	6.03	3.57	5.78

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

£ Gilt Market "main" Issuance

- o £3.41bn, 1% 2024 (1.99x, 0.97%, 14%, Jan '19)
- o £1.72bn, 13/4% 2049 (2.32x, 1.74%, 15%, Dec '18)
- $\circ~ \pounds 0.33 bn~IL^{1}/_{8}\%~2048~(2.18x,\,ry$ -1.96%, 0%, Dec '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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