Jagger & Associates

Investment Update

November 2016

Investment Headlines & Comment

- Real and nominal **gilt yields** rose this month. **Sterling** rallied, reversing its losses from the previous 2 months.
- **US Equities** fared well in the wake of the country's election result.

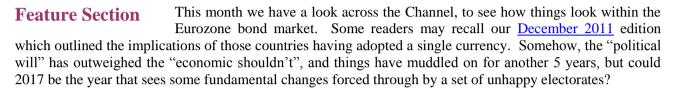


Figure 1a shows the history of the 10-year yields for some Eurozone countries. The convergence in the mid 1990s, and the subsequent decade-long synchronization is clear, but since then, there has been a de-coupling. The current spreads

Figure 1a: European 10-year yields

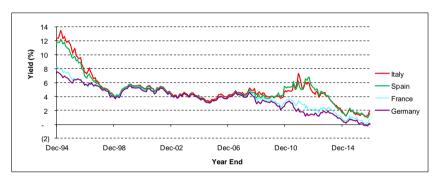
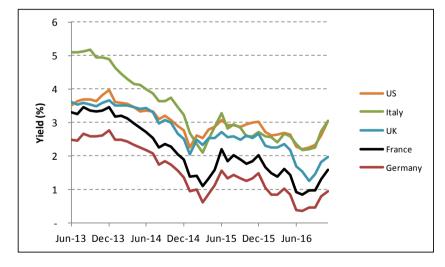


Figure 1b: 30-year yields for Europe, UK and the US



Source: FT

(relative to German yields) are clearly not as significant as they were in 2011, but they have still been pretty persistent for the last couple of years at around 0.5% for France and 1.5%-2% for Italy and Spain. You could potentially work back from these to get crude probabilities of countries exiting the Eurozone, and/or "true yields" that would then apply – at the moment, the quoted yields can be thought of as composites of yields associated with the "in" and "out" scenarios.

Although 30-year bonds have existed for some time (including pre-Eurozone for some countries such as Germany), the Eurozone continues to have a much shorterdated profile than the UK does for its government bond market, but the maturity profile has increasing. For example, recently, there has been a series of 50-year bonds issued by Belgium, France, Italy and Spain. One wonders quite how those bondholders may be feeling now.

Figure 1b shows 30-year yields, with again a persistent spread for France relative to Germany. Now, yields can be useful as a short-hand but prices can be considerably

starker in what they communicate. Suppose you set the coupon (interest) on a new Eurozone bond by assuming investors currently willing to lend $\in 100$ to Germany want to get that $\in 100$ back in 30 years' time (i.e. buy and redeem at par). In effect, within the $\in 100$ that is lent, $\in 75$ is the present day (discounted) value of the $\in 100$ due in 30 years' time, and the other $\in 25$ is the present day (discounted) value of the interest payments during the lifetime of the bond, assuming they are all paid. (As an aside, Germany has negative 30-year real yields, albeit on a <u>very</u> small market size.)

Using that same methodology, then it follows these same investors will only lend France \in 85 or Italy \in 59, in the hope of getting \in 100 in 30 years' time. Moreover, within those, the present day (discounted) value of the redemption payment is \in 62 for France and \in 41 for Italy – something's got to give eventually ...

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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 30 November 2016

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	-1.6	0.6	9.8	5.0	9.2	5.4	6.6
Overseas Equities	-1.5	4.9	26.9	14.1	15.2	9.4	7.9
US Equities	1.3	6.8	30.0	19.1	19.8	11.9	7.7
Europe ex UK Equities	-5.4	0.0	13.0	5.8	10.9	5.4	9.2
Japan Equities	-4.8	5.8	23.0	13.1	13.8	5.7	2.8
Pacific ex Japan Equities	-4.2	2.7	31.7	10.0	10.4	9.8	6.6
Emerging Markets	-6.8	1.6	31.2	6.4	6.1	7.3	7.5
UK Long-dated Gilts	-2.6	-13.1	12.6	12.8	7.4	7.7	8.2
UK Long-dated Corp. Bonds	-2.7	-11.9	12.3	10.1	9.2	6.8	-
UK Over 5 Yrs Index-Linked Gilts	-5.8	-7.2	18.7	13.0	8.8	8.8	8.4
High Yield (Global)	-3.3	4.2	33.0	12.6	12.3	12.0	-
Overseas Bonds	-7.0	-2.4	25.6	9.3	4.2	8.1	5.8
Property *	0.5	0.6	2.7	12.3	9.4	4.0	8.9
Cash	0.0	0.1	0.5	0.5	0.6	1.8	3.6
Commodities £-converted	0.2	10.3	17.1	-13.9	-10.1	-5.0	-0.6
Hedge Funds original \$ basis *	-0.5	0.5	2.6	2.5	3.8	3.5	7.0
Illustrative £-converted version *	5.8	9.3	29.8	12.3	9.7	8.3	8.6
Euro relative to Sterling	-5.4	-0.2	21.0	0.7	-0.2	2.3	-
US \$ relative to Sterling	-2.3	4.8	20.5	9.4	4.7	4.6	1.5
Japanese Yen relative to Sterling	-9.9	-4.8	30.4	5.6	-3.0	4.8	1.5
Sterling trade weighted	5.1	-0.9	-16.4	-2.7	-0.6	-2.9	-0.8
Price Inflation (RPI) *	0.0	0.5	2.0	1.7	2.2	2.8	2.8
Price Inflation (CPI) *	0.1	0.6	0.9	0.7	1.4	2.3	1.9
Price Inflation (RPIX) *	0.0	0.7	2.2	1.8	2.2	3.1	2.8
Earnings Inflation **	-0.2	-2.0	2.4	2.0	1.7	2.2	3.2
All Share Capital Growth	-2.0	-0.1	5.7	1.3	5.4	1.7	3.2
Net Dividend Growth	1.3	3.3	6.0	4.3	5.9	3.8	-
Earnings Growth	6.0	15.8	-34.3	-19.4	-15.6	-5.6	0.5

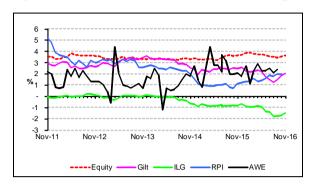
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- 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
- 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.

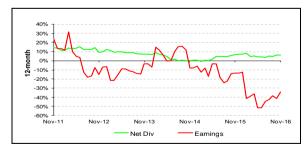


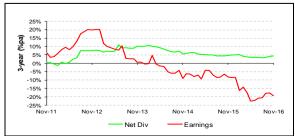
The gap gives a current expectation around 3.5% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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

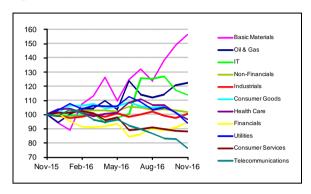




Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



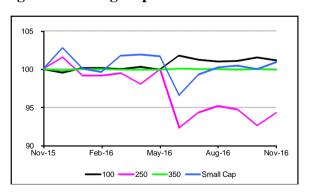
Note: Sector labels for relative lines are in end-value order

There was a sharp rise this month in the rolling 12-month sector dispersion (from 45% to 80%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	0.0	10.2	34.6
Basic Materials	3.3	27.2	71.7
Industrials	1.1	-1.1	10.2
Consumer Goods	-6.2	-7.4	6.2
Health Care	-5.9	-8.9	6.1
Consumer Services	-1.8	-2.3	-3.1
Telecommunications	-9.2	-11.4	-16.2
Utilities	-8.8	-8.5	3.3
Non-Financials	-2.9	-1.0	11.8
Financials	2.2	5.4	3.8
IT	-4.6	-8.7	24.7
All Share	-1.6	0.6	9.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid and Small Cap rose in relative terms this month.

FRS17 volatility indicator

Now discontinued, but available on request.

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

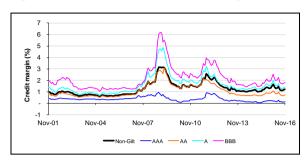


Table 2a: Over 15 Yr Corporate Yields & Margins

Month	iBoxx Corp	FT 20 yr	Margin
End	AA Y'ld (%)	Gilt (%)	(%)
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
Oct '16	2.63	1.85	0.78
Nov '16	2.82	2.03	0.79

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

Category	Mkt Val @ Nov 16 & 13, 10			Weight (%)
Gilts (39)	1,316	1,071	820	70.4
Non Gilts (1,017)	552	523	476	29.6
AAA (123)	108	106	144	5.8
AA (178)	92	85	73	4.9
A (344)	169	165	165	9.0
BBB (372)	183	167	95	9.8

Category	Mkt Val @		W't	Dur'n
	Nov 16 & 13		(%)	(yrs)
Gilts (39)	1,316	1,071	70.4	11.4
< 5 Yrs (11)	378	302	20.2	2.9
5–15 Yrs (11)	350	359	18.7	7.7
> 15 Yrs (17)	588	410	31.5	19.1
Non Gilts (1,017)	552	523	29.6	8.0
< 5 Yrs (339)	165	150	8.8	2.6
5–15 Yrs (437)	230	211	12.3	7.4
> 15 Yrs (241)	157	161	8.4	14.8

£ Gilt Market "main" Issuance

- o £2.75bn 1/2% 2022 (2.10x, 0.78%, Oct 16)
- o £2.87bn 11/2% 2026 (1.95x, 1.38%, Oct 16)
- o £2.71bn 13/4% 2037 (1.64x, 1.81%, new)
- o £1.10bn ¹/₈% IL 2026 (2.09x, ry -1.79%, Jul 16)
- £0.40bn ⁵/₈% IL 2040 (2.24x, ry -1.74%, Apr 15)
 Note: Issuance amounts are nominals.

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (326)	5,827	60.5
Non Sovereigns	3,806	39.5
AAA (712)	1,097	11.4
AA (621)	1,004	10.4
A (833)	829	8.6
BBB (1,003)	875	9.1

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (765)	2,058	21.4
3 – 5 Yrs (893)	2,123	22.0
5 – 7 Yrs (776)	1,588	16.5
7 – 10 Yrs (681)	1,783	18.5
10+ Yrs (380)	2,080	21.6

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Nov 16 & 13)		W't (%)	Dur'n (yrs)
Gilts (27)	594	379	93.9	23.4
< 5 Yrs (2)	34	44	5.4	-
5 – 15 Yrs (7)	143	105	22.6	-
> 15 Yrs (18)	417	230	65.9	30.1
Non Gilts (36)	39	32	6.1	17.1

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

Month	US	Euro	Sterling
End Jun '16	(%) 6.36	(%) 4.13	(%) 6.79
		3.72	6.27
Jul '16	6.01	• · · · =	
Aug '16	5.68	3.47	5.87
Sep '16	5.63	3.57	5.97
Oct '16	5.70	3.43	6.09
Nov '16	5.84	3.77	6.04

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

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