



Investment Update December 2016

Investment Headlines & Comment

- A good month for **UK Equities** – the All Share reached a new high, beyond the levels seen in 2015.
- **Gilt and Corporate Bond** yields fell slightly after rising for the previous 3 months.
- **European Equities** did well this month, with Italy leading the way, up over 14% in a month.

Feature Section

This month we consider how perceptions can be influenced by selective “use” of data, taking the UK Equity market as our somewhat reluctant guinea pig. Total return data for the All Share index goes back to 1962, so the first calendar year in the data series is 1963. The data source for all charts here is FTSE.

Figure 1a shows the annual returns for the All Share index, but with the vertical axis limited to -60% to +50%. The [1973 oil crisis](#) led to returns of -51.7% in 1974 and +150.9% in 1975 which otherwise completely swamp the chart (and also note that their compound 2-year return is 21.2%). Figure 1b shows the same data but only for 1980 onwards (a relevant start point because of the abolition of exchange controls in late 1979).

Figure 1a: All Share Index total returns since 1963 [1975 orange curtailed]

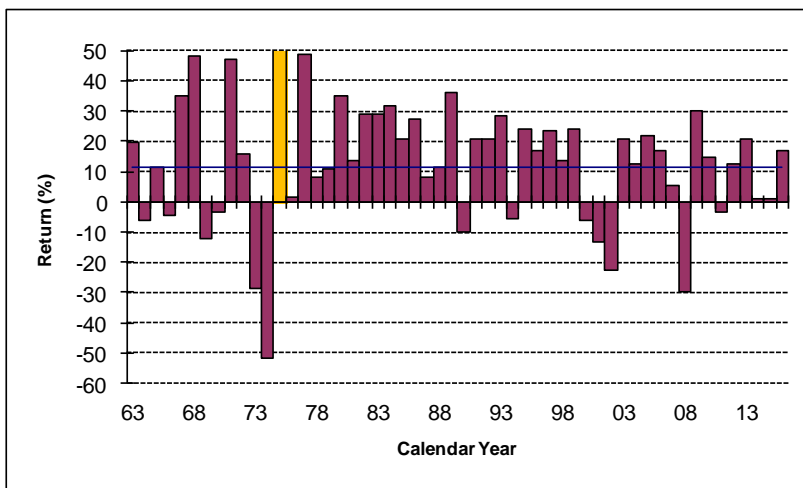
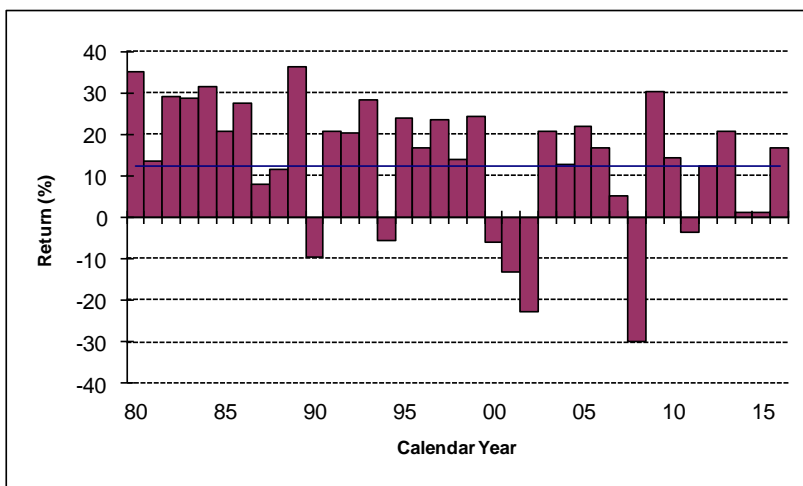


Figure 1b: All Share Index total returns since 1980



This gets us to our first example of “use” of data – the long-run annual volatility of UK Equities is a huge 27% p.a. if you include 1974 and 1975, but it falls to 18% p.a. if you exclude them, and it falls further to 16% p.a. if the data set is limited to 1980 onwards.

If you change from annual data to monthly or quarterly data, you can expect that to alter the volatility figures but not necessarily to increase them – for example, the volatility based on the annual data for the last 20 years is 16.3% p.a. whereas the annualized volatility from the monthly data is lower at 14.0% p.a.

Next, consider the long-run annualized return (the straight lines in Figures 1a and Figure 1b). Measured for the whole period, the long-run return is 11.7% p.a. and with RPI inflation of 5.7% p.a. for the period, that implies a real return of about 6% p.a. (which is arguably somewhat on the high side, but that conclusion is going to be affected by whether equities were fairly valued or not at the start of 1963).

Now, if restricted to 1980 onwards then the long-run return is slightly higher at 12.2% p.a. even though that period had rather *lower* RPI inflation at 4.1% p.a., thus producing an associated real return of about 8.1% p.a. This is higher than for the longer period, and appears somewhat unsustainable, so the maxim of “take the money and run” does come to mind if you still hold the asset in the

first place. (Some readers may recall our [February 2014](#) and [July 2010](#) editions where we looked at Shiller analysis as a means of testing whether equities were fairly valued or not, but unfortunately that analysis is now rather difficult to do, given the peculiar distortions that continue to affect the P/E data reported in the FT.)



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 December 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	5.0	3.9	16.8	6.1	10.1	5.6	6.7
Overseas Equities	3.3	6.8	30.3	15.2	15.7	9.5	8.3
US Equities	3.0	9.0	33.4	19.7	20.0	12.1	8.1
Europe ex UK Equities	7.2	5.4	21.2	8.0	12.9	5.7	9.5
Japan Equities	2.2	5.1	22.7	14.0	13.9	5.6	3.4
Pacific ex Japan Equities	0.4	0.9	28.7	11.0	10.2	9.4	6.7
Emerging Markets	1.4	0.8	33.1	7.8	6.4	7.0	7.6
UK Long-dated Gilts	3.2	-6.0	18.5	14.4	7.7	8.2	8.4
UK Long-dated Corp. Bonds	3.6	-5.3	18.5	11.7	9.4	7.3	-
UK Over 5 Yrs Index-Linked Gilts	3.7	-3.0	27.4	15.2	9.1	9.4	8.6
High Yield (Global)	2.9	5.6	36.9	13.8	12.2	12.2	-
Overseas Bonds	0.4	-3.6	22.0	10.2	3.9	8.3	6.0
Property *	0.8	1.6	2.6	12.1	9.5	3.9	8.9
Cash	0.0	0.1	0.5	0.5	0.6	1.7	3.5
Commodities £-converted	5.9	11.2	32.8	-12.5	-9.1	-3.8	-0.4
Hedge Funds original \$ basis *	0.8	0.8	3.2	2.4	4.2	3.4	6.9
Illustrative £-converted version *	-1.5	5.7	24.4	12.1	9.1	8.2	8.5
Euro relative to Sterling	0.5	-1.3	15.8	0.9	0.4	2.4	-
US \$ relative to Sterling	1.1	5.1	19.3	10.3	4.7	4.7	1.6
Japanese Yen relative to Sterling	-1.2	-8.7	23.0	6.5	-3.7	4.9	1.5
Sterling trade weighted	-1.2	-0.5	-14.7	-3.2	-1.0	-3.0	-0.9
Price Inflation (RPI) *	0.3	0.4	2.2	1.7	2.2	2.8	2.8
Price Inflation (CPI) *	0.2	0.5	1.1	0.7	1.4	2.3	1.9
Price Inflation (RPIX) *	0.3	0.5	2.5	1.9	2.2	3.1	2.8
Earnings Inflation **	0.3	-1.4	2.8	2.2	1.8	2.2	3.2
All Share Capital Growth	4.9	3.1	12.5	2.4	6.3	1.9	3.3
Net Dividend Growth	0.0	3.4	5.5	4.3	6.0	3.8	-
Earnings Growth	0.7	7.1	-33.6	-19.2	-13.8	-5.5	0.5

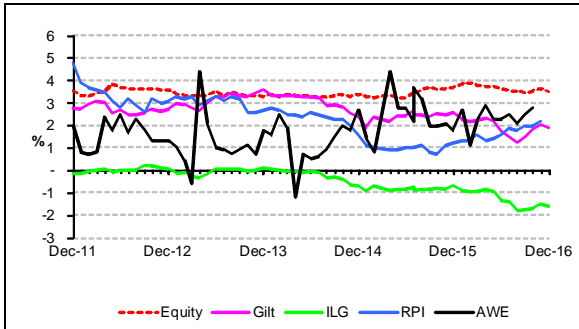
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- 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 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.

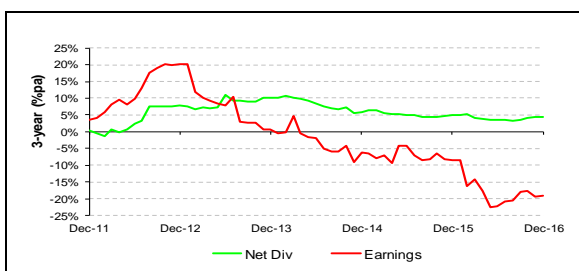
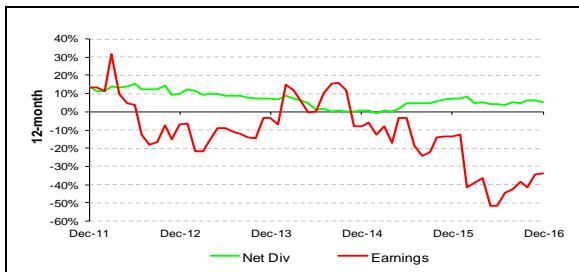


The gap gives a current expectation around 3.5% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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]

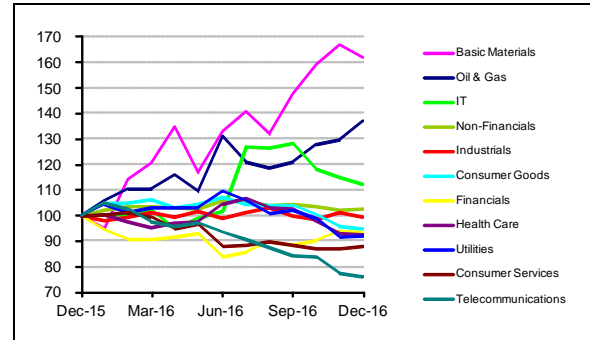
Figure 3: Dividend & Earnings Growth



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



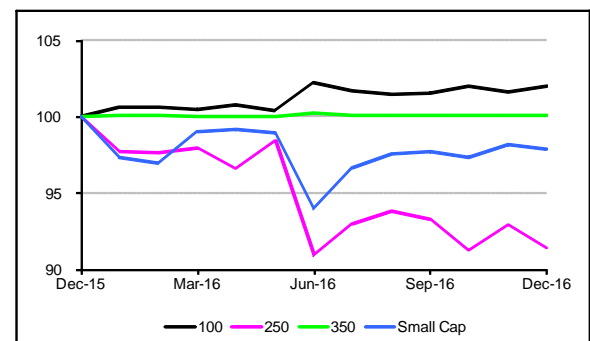
Note: Sector labels for relative lines are in end-value order

There was a rise this month in the rolling 12-month sector dispersion (from 80% to 86%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	10.8	17.6	59.8
Basic Materials	1.8	14.0	88.8
Industrials	3.1	3.2	15.9
Consumer Goods	4.3	-5.2	10.7
Health Care	4.3	-6.5	8.0
Consumer Services	5.9	3.2	2.4
Telecommunications	3.4	-6.3	-11.3
Utilities	5.7	-6.3	7.4
Non-Financials	5.2	2.0	19.5
Financials	4.4	9.7	8.9
IT	2.8	-8.9	31.2
All Share	5.0	3.9	16.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid and Small Cap fell 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



Bond market information

Figure 5: £ Non-Gilt Credit Margins

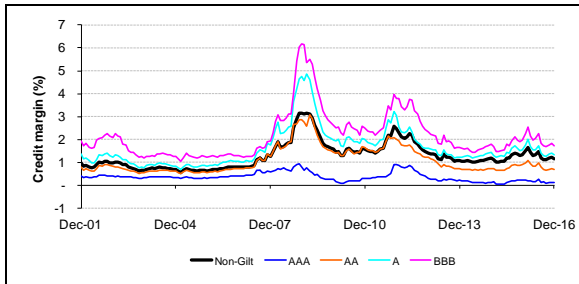


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
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
Dec '16	2.60	1.86	0.74

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

Category	Mkt Val @ Dec 16 & 13, 10			Weight (%)
	Dec 16	Dec 13	Dec 10	
Gilts (40)	1,341	1,065	827	70.6
Non Gilts (1,014)	559	516	467	29.4
AAA (125)	110	104	136	5.8
AA (176)	92	84	72	4.8
A (340)	169	164	162	8.9
BBB (373)	187	164	96	9.9

Category	Mkt Val @ Dec 16 & 13		W't (%)	Dur'n (yrs)
Gilts (40)	1,341	1,065	70.6	11.5
< 5 Yrs (11)	378	299	19.9	2.8
5-15 Yrs (11)	359	359	18.9	7.6
> 15 Yrs (18)	605	406	31.8	19.2
Non Gilts (1,014)	559	516	29.4	8.1
< 5 Yrs (337)	165	148	8.7	2.6
5-15 Yrs (443)	236	210	12.4	7.5
> 15 Yrs (234)	158	157	8.3	15.0

£ Gilt Market "main" Issuance

- £3.12bn ½% 2022 (2.05x, 0.87%, Nov 16)
 - £2.67bn 1½% 2026 (1.99x, 1.39%, Nov 16)
 - £2.25bn 1½% 2047 (1.73x, 1.96%, Oct 16)
 - £0.80bn 1/8% IL 2036 (2.15x, ry -1.52%, Oct 16)
- Note: Issuance amounts are nominals.

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (330)	5,895	60.5
Non Sovereigns	3,849	39.5
AAA (715)	1,100	11.3
AA (622)	1,008	10.3
A (828)	814	8.4
BBB (1,048)	926	9.5

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (778)	2,102	21.6
3 – 5 Yrs (909)	2,092	21.5
5 – 7 Yrs (777)	1,653	17.0
7 – 10 Yrs (694)	1,809	18.6
10+ Yrs (385)	2,088	21.4

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Dec 16 & 13)		W't (%)	Dur'n (yrs)
Gilts (27)	617	374	93.9	23.6
< 5 Yrs (2)	34	44	5.2	-
5 – 15 Yrs (7)	146	103	22.2	-
> 15 Yrs (18)	437	226	66.5	30.2
Non Gilts (36)	40	31	6.1	17.2

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

Month End	US (%)	Euro (%)	Sterling (%)
Jul '16	6.01	3.72	6.27
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
Dec '16	5.61	3.45	5.80

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

