

Investment Update April 2018

Investment Headlines & Comment

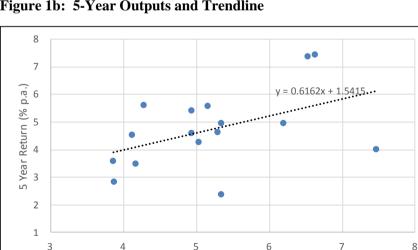
- Most equity markets rallied in Nominal and real yields for gilts local terms this month, apart from the US (a minimal gain).
 - rose this month, continuing the volatility of their returns.
- The UK Equity Oil & Gas and Basic Materials sectors have both had a strong 12 months.

Feature Section This month we return to the subject of Absolute Return / Diversified Growth funds, which we last considered in our February 2017 edition, where the focus was on the period of time taken to recover from a drawdown (aka a loss). In our previous foray into the asset class in our July 2013 edition, we had focused on the dispersion of manager returns. Given the turbulent markets in Q1 2018, we thought it worth considering the evidence for continued dispersion, not just in the returns but also in the volatility that investors were required to experience.

Figure 1a shows the 1-, 3- and 5-year gross-of-fees return ranges for a peer group of 16 comparable funds, plus the 5year volatility as well (from monthly returns). Note that the identity of the maximum, minimum and median managers vary by column along each specific row. An alternative approach would be to fix them for one column (e.g. 5 Year return) and then require that manager's results to be used in the other columns on that row. It's fair to say that the 3- and 5-year median returns are somewhat disappointing, but they may simply reflect a degree of caution after a long run of bull markets. Downside mitigation could prove redeeming if (or when) Quantitative Easing starts to be unwound.

Figure 1a: Profile of Return and Volatility Ranges

	1 Year Return (%)	3 Year Return (% p.a.)	5 Year Return (% p.a.)	5 Year Volatility (% p.a.)
Maximum	5.9	7.3	7.5	7.5
Median	3.0	3.6	4.6	5.1
Minimum	-1.8	-0.1	2.4	3.9



5 Year Volatility (% p.a.)

Figure 1b: 5-Year Outputs and Trendline

Source: J&A

At the 5-year level, the 31 December 2017 range was 5.8% p.a., and that too has fallen to 5.1% p.a. at 31 March 2018. However it is still a big number for the dispersion, particularly given how index-tracking in many other classes gives an opportunity to minimize the risk of going with a single manager. Figure 1b, plots the risk-return

The dispersion of the 1-year return

has reduced this quarter - the range from Maximum to Minimum was 9.8% at 31 December 2017, but moved to 7.7% at 31 March 2018.

outputs for the 5-year risk-return data set, and considers a trend line through them. It is interesting (and perhaps counterintuitive) that the horizontal range of the 5-year volatility data is actually narrower than that for the 5-year returns. This really reflect the way one manager has been particularly bearish whereas another two have been very risk-hungry, and thus have produced bad and good taillike returns respectively.

The trendline is interesting, because (in round numbers), it shows that on average, investors have to bear an additional 1.5% p.a. of volatility for each 1% p.a. of additional return. This is consistent with the notion that in moving across individual asset classes, the increase in volatility generally exceeds the increase in the return. It is also worth pointing out that over the 5-year period, UK and Overseas Equity volatility were both just under 10% p.a. and the volatility of longer-dated bonds (whether UK gilts, Index-Linked Gilts or Overseas) was higher than that. It's a mad world.



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.]

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	6.4	1.1	8.2	7.0	7.8	6.7	5.4
Overseas Equities	2.6	-2.3	7.8	12.5	12.6	10.0	7.3
US Equities	2.2	-2.6	6.5	14.5	15.7	13.1	6.4
Europe ex UK Equities	3.8	-2.2	7.4	10.0	10.1	6.1	7.5
Japan Equities	2.6	0.5	12.7	12.4	10.8	7.8	5.5
Pacific ex Japan Equities	2.9	-2.9	11.5	10.4	9.1	8.7	10.1
Emerging M arkets	1.6	-3.7	14.7	10.3	7.7	6.3	9.3
UK Long-dated Gilts	-2.2	2.4	-0.2	6.7	7.0	8.4	7.1
UK Long-dated Corp. Bonds	-0.8	-1.1	0.6	6.1	6.4	8.3	7.1
UK Over 5 Yrs Index-Linked Gilts	-2.9	0.1	-4.7	7.0	6.8	8.2	7.6
High Yield (Global)	1.9	1.6	-1.3	9.5	7.2	11.7	7.7
Overseas Bonds	0.1	2.3	-2.1	6.3	3.2	6.2	5.5
Property *	0.9	2.3	11.3	8.9	11.8	6.2	8.6
Cash	0.1	0.2	0.4	0.5	0.5	1.0	3.1
Commodities £-converted	7.0	10.8	14.7	-2.4	-7.9	-7.8	1.0
Hedge Funds original \$ basis *	-0.5	0.0	6.0	3.5	4.2	3.6	6.2
Illustrative £-converted version *	-2.2	-3.5	-5.5	5.5	5.9	7.3	7.2
Euro relative to Sterling	0.1	0.1	4.2	6.3	0.7	1.1	
US \$ relative to Sterling	1.8	3.2	-6.1	3.7	2.5	3.7	1.0
Japanese Yen relative to Sterling	-1.0	3.0	-0.1	6.9	0.1	3.2	1.0
	-1.0	5.0	-4.3	0.9	0.1	3.2	1.9
Sterling trade weighted	-0.3	-0.5	0.1	-4.5	-0.4	-1.6	-1.2
Price Inflation (RPI) *	0.1	0.1	3.3	2.7	2.3	2.8	2.8
Price Inflation (CPI) *	0.1	0.1	2.4	1.7	1.4	2.3	2.0
Price Inflation (RPIX) *	0.1	0.1	3.4	2.8	2.4	3.1	2.9
Earnings Inflation **	2.4	5.4	2.0	1.9	1.7	0.9	3.1
All Share Capital Growth	6.0	-0.2	4.2	3.2	4.0	2.9	2.0
Dividend Growth	1.6	0.3	8.9	7.8	6.0	3.2	4.3
Earnings Growth	0.1	49.3	110.6	13.2	5.0	1.6	4.4

Table 1:Investment Data to 30 April 2018

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

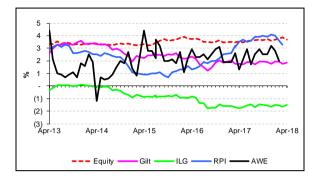
- Commodities GSCI Total Return, converted to UK £ by J&A
- Hedge Funds Composite HFRI US \$ based total return index plus converted to UK £ by J&A. NB A smooth "cash+x%" return will only be shown in the base 'hedged' currency, here the US \$.
- Cash an indicative index based on the three-month London 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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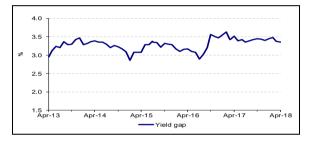


Yields and Yield Gaps

Figure 2: Yields, Inflation and Yield Gaps



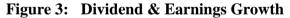
The yield gap is a measure of expected average future inflation, derived as long bond yield minus ILG yield.

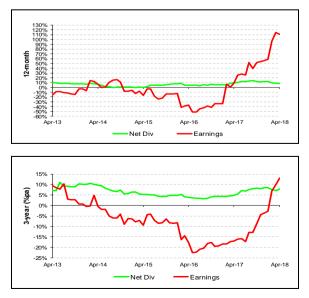


The gap gives a current expectation around 3.4% for longer-term inflation + *the risk premium for gilts, relative to index-linked gilts.*

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*]

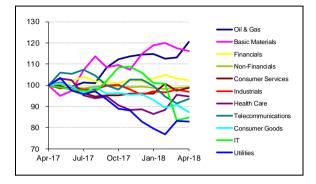




Note: Earnings data from mid 2015 onwards is under review by FTSE Russell as one-off events may be affecting the prospective P/E ratios

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



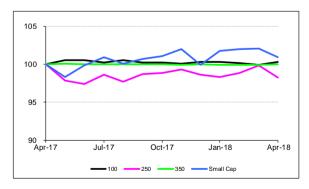
Note: Sector labels for relative lines are in end-value order

There was a modest rise this month in the rolling 12month sector dispersion (from 34% to 38%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	13.3	6.2	30.3
Basic Materials	5.3	-1.4	25.6
Industrials	5.4	0.7	4.8
Consumer Goods	2.2	-5.5	-5.8
Health Care	5.5	10.9	2.5
Consumer Services	7.8	3.9	6.8
Telecommunications	8.9	-5.0	1.1
Utilities	6.4	5.4	-10.3
Non-Financials	6.7	1.4	7.2
Financials	5.6	0.3	10.8
IT	8.3	-15.2	-8.3
All Share	6.4	1.1	8.2

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid 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

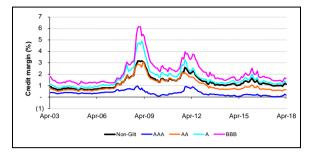


Table 2a: Over 15 Yr Corporate Yields & Margins

Month	iBoxx Corp	FT 20 yr	Margin
End	AA Y'ld (%)	Gilt (%)	(%)
Nov '17	2.64	1.89	0.75
Dec '17	2.42	1.77	0.65
Jan '18	2.56	1.95	0.61
Feb '18	2.66	1.94	0.72
Mar '18	2.56	1.74	0.82
Apr '18	2.65	1.85	0.80

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

Category	Mkt Val @ Apr 18 & 15, 12			Weight (%)
Gilts (41)	1,325	1,198	990	70.1
Non Gilts (1,061)	565	543	481	29.9
AAA (132)	108	99	124	5.7
AA (150)	75	93	61	4.0
A (337)	163	177	169	8.6
BBB (442)	219	174	127	11.6

Category	Mkt Val @		W't	Dur'n
	Apr 1	18 & 15	(%)	(yrs)
Gilts (41)	1,325	1,198	70.1	11.8
< 5 Yrs (11)	358	328	19.0	2.7
5-15 Yrs (12)	366	358	19.4	7.8
> 15 Yrs (18)	600	512	31.8	19.7
Non Gilts (1,061)	565	543	29.9	8.1
< 5 Yrs (371)	181	158	9.6	2.9
5–15 Yrs (453)	236	229	12.5	7.6
> 15 Yrs (237)	148	156	7.8	15.3

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£ Gilt Market "main" Issuance

- o £2.50bn 1⁵/₈% 2028 (2.39x, 1.60%, 0%, Feb 18)
- o £2.19bn 134% 2057 (1.98x, 1.66%, 9%, Feb 18)

 $\circ \pm 0.75bn \frac{1}{8}$ IL 2048 (2.16x, ry -1.41%, n/a, Feb 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.

Tables 2d, 2e: € Market Size and Maturity (Apr 18)

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (364)	6,177	59.9
Non Sovereigns	4,140	40.1
AAA (840)	1,166	11.3
AA (653)	1,028	10.0
A (938)	889	8.6
BBB (1,239)	1,057	10.2

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (934)	2,215	21.5
3 – 5 Yrs (1,034)	2,204	21.4
5 – 7 Yrs (854)	1,709	16.6
7 – 10 Yrs (758)	1,908	18.5
10+ Yrs (454)	2,280	22.1

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Apr 18 & 15)		W't (%)	Dur'n (yrs)
Gilts (28)	648	499	100.0	22.6
< 5 Yrs (3)	59	76	9.1	3.0
5 – 15 Yrs (7)	150	106	23.2	9.2
> 15 Yrs (18)	439	316	67.8	29.8

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

Month	US	Euro	Sterling
End	(%)	(%)	(%)
Nov '17	5.39	2.88	5.37
Dec '17	5.45	2.95	5.40
Jan '18	5.48	2.95	5.39
Feb '18	5.75	3.16	5.72
Mar '18	5.99	3.28	5.90
Apr '18	6.00	3.24	5.88

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



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