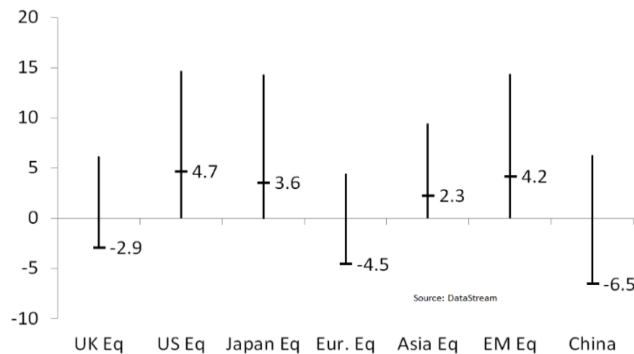
Market Backdrop

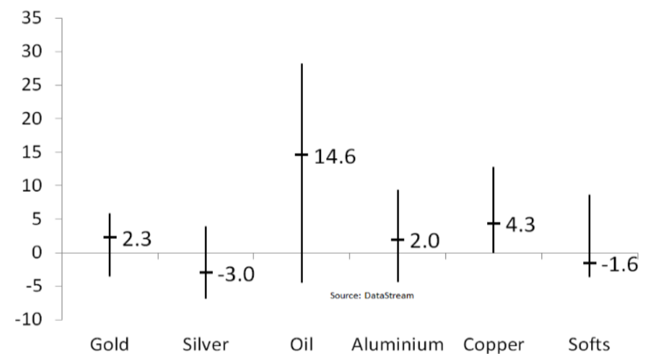
This note is intended to support discussion at the next meeting of the Local Pension Committee of the Leicestershire County Council Pension Fund.

At the time of writing, markets are particularly volatile. If there are meaningful changes between the date of production and the meeting then an update will be provided.

Market Movements

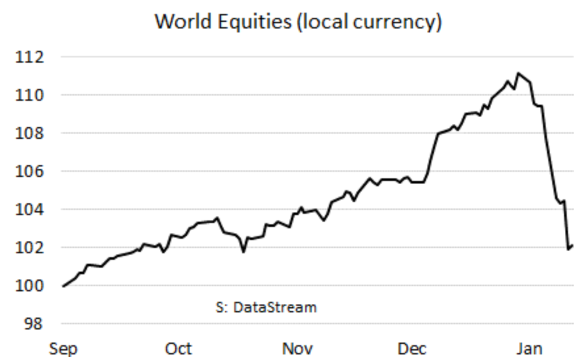
The figures below describe the % performance of various markets from the end of Q3, 2017 to the close on 10th February 2018; the charts also show the range of performance over that period.





Relative to the level at the end of the third quarter, equity markets have delivered a mixed performance with UK, Europe and China sitting on the lows while other markets have delivered modest returns. All markets attained higher levels during the period.

The real story of the past five months is perhaps better illustrated in evolution of global equities shown in the chart opposite. Equity prices had appreciated significantly through Q4, almost without interruption, well into January before falling precipitously. The market ascent in January was the strongest start to a year in many years; the subsequent reversal is proving just as noteworthy.

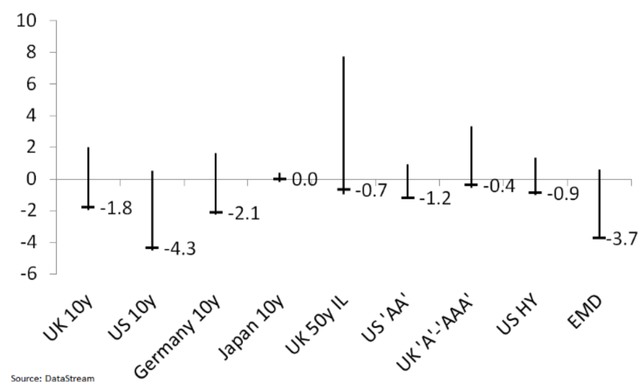


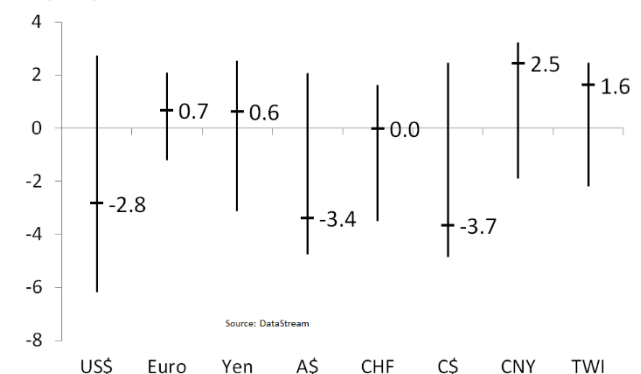
Catalysing the correction was the move higher in US bond yields as they respond to continuing strong economic data across the globe, the growing belief that several major central banks will join the US and UK in moving away from the extra-ordinary monetary policy setting and, recently, the apparent emergence of upward wage pressure in the US (albeit subject to minimum wage distortions). Bond investors tried to force yields higher a year ago but were thwarted by an unexpectedly weak start to the year in the US economy; no such headwind is apparent today. As will be shown later, US bond yields have risen to begin to offer a viable alternative to owning equities. Another section of this note will highlight some of the technical forces that are compounding the adjustments currently underway.

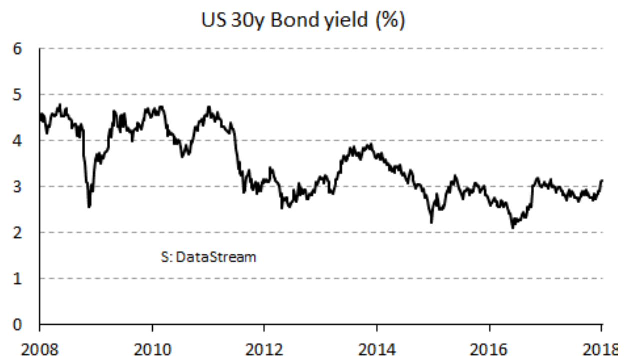
Commodity markets have demonstrated similar performance profiles and, as for equities, are currently below their best levels. The moves in the oil price have been significant as Brent Crude touched $70pb. Sustaining the higher prices has been ongoing production cuts in OPEC (and its satellites) and a steady decline in (previously elevated) inventory levels; this despite a rise in the US rig count and shale related production. Higher energy costs are being seen by those worried about inflation as ensuring that we don't

get a repeat of the slow growth of consumer prices seen last year. Despite rising inflation expectations and, as we will see, a weaker US$, Gold has failed to sustain its rally (which saw the price hit $1360 per ounce).

Bond markets have moved lower over the period with most markets currently seeing prices on lows for the period. That said, price movements remain orderly and subdued (relative to their history and to the current turbulence in equity markets). The sharpest adjustment has come in US bonds where yields have surged in recent weeks (the 30-year yield is 40bps higher than at the start of the year). That said, the absolute yield level remains well below that of the past ten years (see chart opposite). UK gilt 30-year yields have, by comparison, risen just 20bps (to 1.97%) highlighting the contrasting outlook for the UK economy.







The Pound trade weighted index (TWI) ended the period 1.6% better mostly reflecting the weakness in the US$ (which is now 10% lower, on a TWI basis, than its level at the end of 2016). £'s lift was also driven by the hike in UK base rates to 0.5% with the possibility of additional rate increases to come; UK policy rates are reflecting the higher level of UK inflation.

Consensus expectations – economic growth and inflation

Consensus economic forecasts for 2017 ended the year at the highs helped by relatively vibrant data prints across the globe for most of the second half of the year. The outlook for 2018 is, mostly, for a repeat of 2017 with moderation expected in 2019. The UK is expected to underperform both the EZ and US.

Table 1: Consensus forecasts – Real GDP growth (%)

	2017	2018	2019
US	2.3	2.7	2.3
Eurozone	2.4	2.2	1.9
UK	1.7	1.4	1.5
Japan	1.7	1.3	1.0
China	6.9	6.5	6.3

The Eurozone economy was notably firm in the middle of the year on the pent-up demand 'released' by the favourable French election result and as the ECB's QE and negative interest rate policies started to work. So much so that, and despite the more moderate full year expectations for 2018, real time estimate of EZ growth in this quarter are running above 4%; heady days for Europe.

The US economy ended the year, firmly boosted by expectations around the tax reform that was to be announced around Christmas and by the lower US$. Tax reform will lift corporate profits (the initial indications are for a 4% increase in earnings per share in 2018) and many US companies have announced $1,000 handouts for staff. UBS has estimated that the giveaway is worth around 2 weeks of US retail spending; a boost but not a bonanza. The shale industry was instrumental in supporting a strong improvement in capital investment last year; 2018 is expected to see capital expenditure acquire a much broader base. As seen in the EZ, the Atlanta Federal Reserve estimates that the US economy is currently growing at a 4% pace (annualised rate). While the UK economy has also improved, from a much lower base, the forecasts are still discounting a negative *Brexit* impact; this is unlikely to change until clarity emerges over the eventual deal.

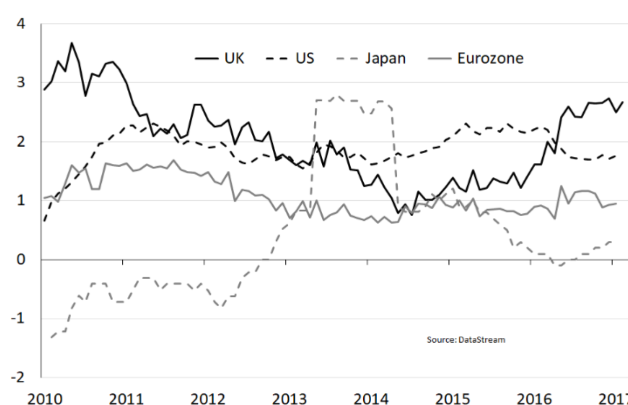
The outlook for inflation in 2017 and 2018 has generally lifted over the winter (Table 2 below). The main take-away remains however that inflation rates, this year and next, will remain contained. Nonetheless, monetary policymakers remain keen to exploit the better economic backdrop (moderate, synchronised and with low volatility) to move away from near zero (or negative) interest rates. This is about using the markets' willingness to allow higher interest rates (in the US) to create some 'altitude' from which rates could later be reduced if necessary. US policymakers may also be keen to soften the impact of Trump's fiscal expansion.

Table 2: Consensus forecasts – Inflation (CPI, %)

	2017	2018	2019
US	1.5	1.8	2.0
Eurozone	1.1	1.5	1.6
UK	1.6	2.5	2.1
Japan	0.0	0.9	1.0
China	2.1	2.3	2.3

Currently, core inflation rates in the major economies have been broadly stable (Chart 1). The exception is the Japan where prices, and wages, have been creeping higher. Japan's inflation problem has been the lack of it and few will mourn the death of deflation. Just to be sure, the Bank of Japan has been clear that they are in no hurry to tighten monetary policy; they have had false dawns before and don't want to risk another. QE and explicit yield suppression in Japan will continue.

Chart 1: Core CPI Rates (%, yoy)



In the UK, the latest data maintained higher levels of headline retail and consumer price inflation (Chart 2). This enabled the Bank of England to lift base rates in December, removing the 'emergency' post-*Brexit* policy easing. Although all sectors of the UK price data continue to see prices rising, Chart 2 and 3 offer a hint that the lift in prices might be starting to roll-over; time will tell (and will depend, as much as anything, on what happens to £).

Chart 2: UK inflation rates (%, yoy)

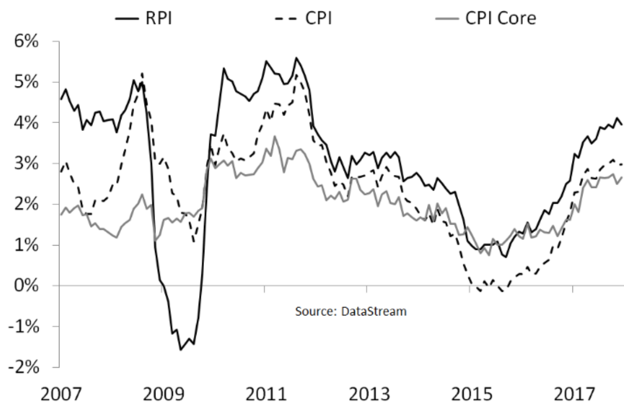
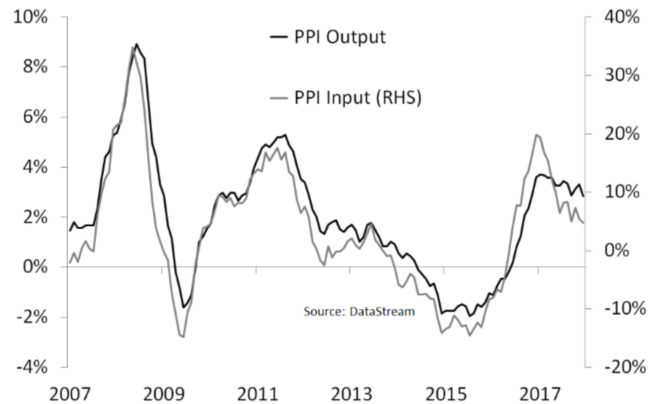


Chart 3: UK producer price growth (yoy)



Beyond the UK and US, diminished 'macro' risk is making it hard for policymakers to sustain the 'emergency' economic policy-setting of the post-GFC period and some look keen to try to introduce a level of normalisation. Risk markets, supported by a reasonable improvement in corporate earnings and, until very recently, have allowed this phase to develop. Should financial markets continued to gyrate wildly and economic volatility return, for whatever reason, this process could quickly stop.

Short and long-term interest rates

The current consensus forecast for the main policy settings are shown in Table R1; away from Japan, rates are perceived to be on the rise albeit at varying speeds.

Table R1: Consensus forecasts – main policy setting at year end (%)

	Latest	2018	2019
US Fed	1.38	2.30	2.85
ECB	-0.40	0.00	0.40
BoE	0.50	0.70	1.05
BoJ	-0.10	0.00	0.00

The US Fed validated market pricing by hiking rates again last December (to 1.5%). The market expects US policy rates to increase at least three times (to 2.25%) this year; some commentators think a fourth move is possible. In the context of the past forty years, US interest rates are still low and, in real terms, accommodative. FOMC members recently confirmed that they judge the neutral policy rate to be 2.8%; monetary policy might normalise but this will be to a 'new' normal. Longer term, in the US rates are expected to hit their terminal rate in 2019. This introduces the concept of a protracted pause at some stage.

The neutral projection suggests that the equilibrium longer term US real interest rate is 0.8% and implies that US 30-year inflation protected bonds are, at a real yield of 1%, looking cheap.

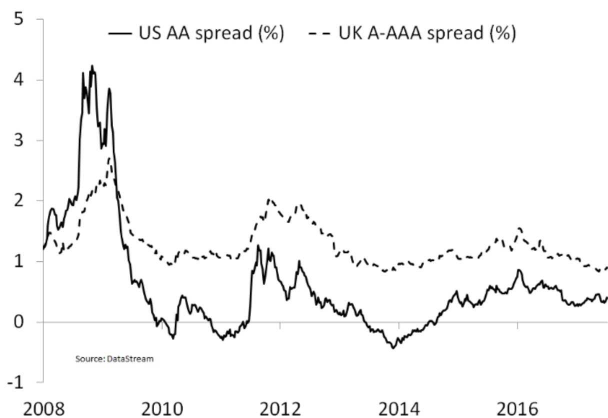
The outlook for longer dated nominal bond yields is shown in Table R2. US yields are expected to rise steadily into 2019 in response to the policy rate, on sustained economic growth and a recovery in inflation; higher US yields will drag other markets with them. Nonetheless, nowhere will yields get 'high'.

Table R2: Consensus forecasts – ten-year bond yields at year end (%)

	Latest	2017	2018
US	2.4	2.9	3.4
Germany	0.8	0.9	1.3
UK	1.6	1.7	2.1
Japan	0.1	0.1	0.2

Non-Government Bonds

Investment grade (IG) bond spreads remain tight; spreads need to rise substantially to make them a compelling investment. That said, retail demand for IG bond funds has been very strong helped by improving credit quality consistent with better levels of economic growth and ongoing asset purchases by the European Central bank (as it implements QE). Until recently the same was true of high yield bonds where the spread was around multi-year lows; recent equity turbulence has led to HY profit-taking in this most economically sensitive fixed income market.

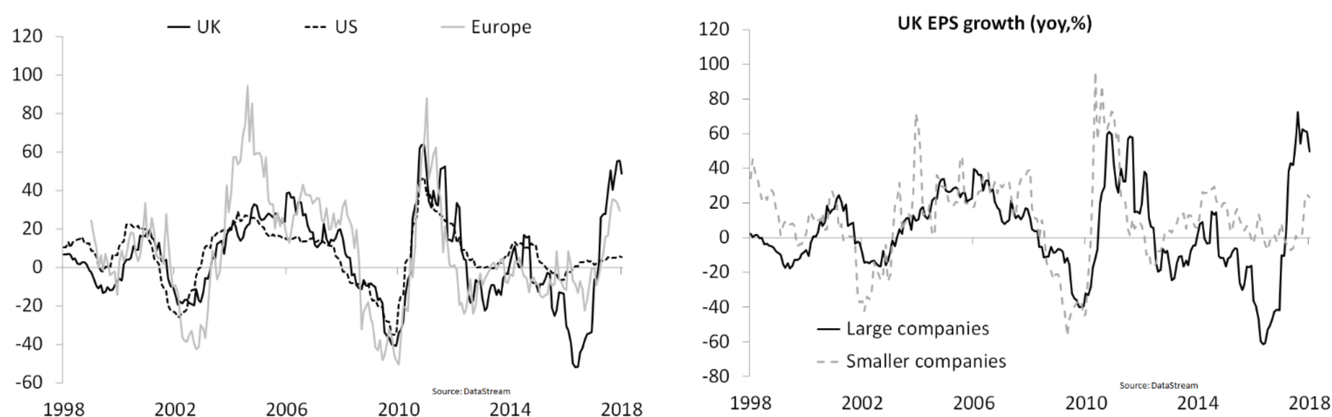


Regardless of which emerging market debt index is followed, all performed well through 2017. In a world of still wafer thin developed bond yields, investors continue to find EMD attractive – and more secure. Emerging markets have outperformed in the recent sell-off; for the moment, this has been a developed markets phenomenon.

Equities

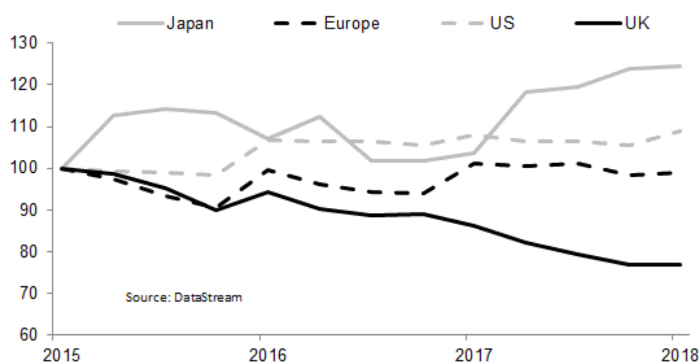
The chart (E1) below details how forecast earnings per share (EPS) for the UK, US, European and Japan equity markets have evolved over the past twenty years; they chime with the economic cycle. The fading, but significant, impact of £ weakness in 2016 on the earnings of the larger UK companies, made more dramatic by being off a low base, is clear to see. Note that U.S. corporate earnings will be boosted by tax reform (not yet appearing in the data).

Charts E1: Experienced earnings per share growth



EPS forecasts for the next financial year point to an improvement in Japan (where the recent earnings season has been very strong) and the US (tax boosted). Analysts appear reluctant to discount a strong follow through in Europe where the strength of the € is a concern. The UK outlook remains poor.

Chart E2: Forecast earnings per share (next financial year, rebased to 100 in 2014)



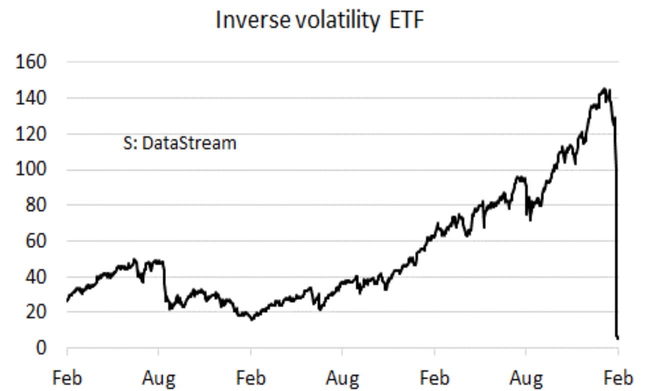
Looking beyond the next financial year, equity analysts are generally remain optimistic despite a modest markdown (Table 5); it should be remembered that analysts are rarely pessimistic.

Table 5: Consensus EPS growth forecasts – second and third financial years with change from previous report (source: DataStream)

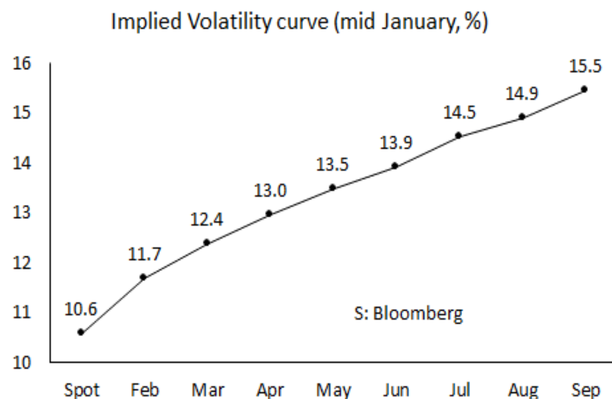
	UK	US	Japan	Europe
FY2	7% (u/c)	10% (-1%)	8% (+2%)	8% (u/c)
FY3	8% (u/c)	11% (+1%)	9% (+1%)	8% (-1%)

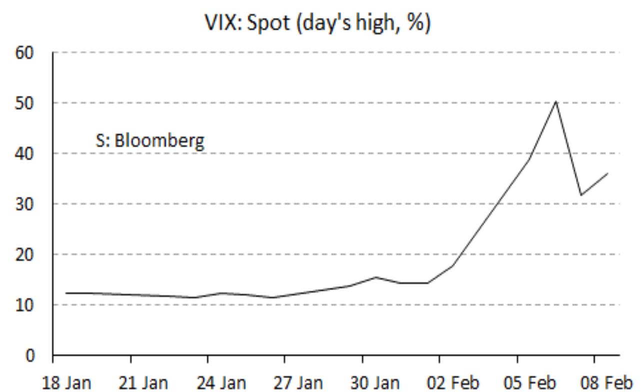
Feature: **'short vol' products**

One of the features of financial markets in recent years and until now was the very low level of market volatility e.g. the sharpest sell off in US equities in 2017 was, peak to trough, just 3%. Calm markets spawned a range of investment products which generate profits for investors if market volatility remained low. As invariably happens, demand emerges for leveraged versions of these constructs. The chart opposite is of an inverse volatility ETF. Prior to its near vertical collapse this ETF was worth $2bn almost all of which was owned by retail investors. It is now worth nothing. This section provides detail on how these products work.



The expected level of stock volatility is a key component in the pricing of equity options: the higher the level of volatility expected, the greater, all else equal, will be the option price. Investors can not only trade in options but they can also speculate on the level of volatility itself (captured in the VIX index of US equity volatility). Typically, the implied level of volatility increases with time so that while, in mid-January, spot volatility was 10.6%, this was expected to rise steadily each month to 15.5% in September. If nothing changes then a trader could have, in mid-January, sold the September level of VIX index and, effectively, buy that contract back at 10.6% in September; in this the trader is benefitting from roll-down (so called). It is from harvesting roll-down that inverse volatility structures make their money. In the case of the ETF pictured above the average maturity of contracts sold was one month and, as at mid-January, at an average level of 11.7%.





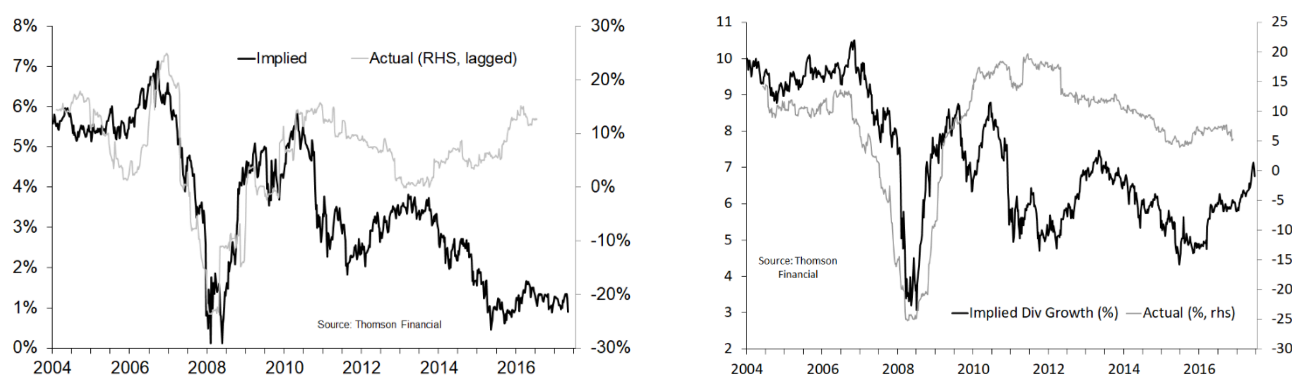
Unfortunately, things do change. In the example above, the ETF having sold February VIX at 11.7% found, in early February, that the level at which that contract had to be bought back had soared to 50% (more than four times the levels sold) representing a huge loss on the position. Over and above the need to lodge capital as surety against the position, investors in the ETF were redeeming in droves and so the short positions had to be bought back.

This is just one example of myriad ways in which investors had geared into the low volatility conditions of recent years. The eventual, and inevitable, end of these conditions and the problems that would result, was frequently highlighted by Ruffer as a cause for great concern. The scale of the 'low vol' trade was such that its unwinding could catalyse broader market selling; this is what has been seen in February.

Equity Valuation

A preferred means of assessing the relative valuation of equities draws upon the level of dividend growth required to generate the same returns relative to the alternative of investing in bonds. In the UK market (Chart E3), the implied breakeven level of long-term dividend growth looks to be modest in absolute terms and against what has been delivered; low bond yields help improve the comparison. If allowance is made for a risk premium – important given the uncertainties surrounding *Brexit,* then UK dividends may never grow but equities would still broadly offer better value than fixed income. This position could persist for some time. In the US on the other hand, equities have seen the breakeven dividend growth lift in recent months (Chart E4) to levels that are starting to look less like as a foregone conclusion; US bonds have become much more competitive especially with cash rates continuing to head higher.

Charts E3 and E4: UK (FT All Share, left chart) and US (S&P Composite, right chart) implied dividend growth



The implied outlook for the more domestically focused FTSE 250 is determined in the same manner as the broader market. Here and until recently, the path of actual dividend growth has been more consistent with the evolution of the breakeven rate (Chart E5). The chart also suggests that there may be some poor news on actual dividends to absorb in the near term.

Chart E5: UK (FTSE 250 Index), imp. div. growth

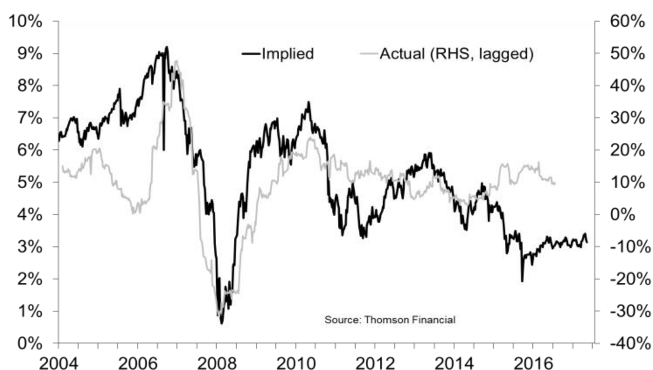
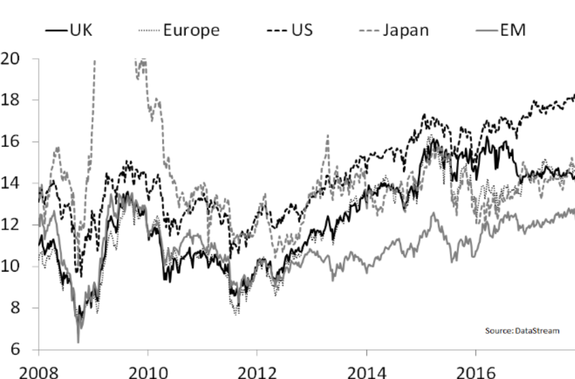


Chart E6: Regional PE ratios



Looking at PE ratios (Chart E6), valuations have been rising in the US and, at a lower level, across emerging markets; ratios in other three regions appear to have stabilised. In all cases the level of valuation is within historic ranges – albeit towards the upper end; the same cannot be said for (non-US) government or corporate bonds.

Regardless of how it is delivered, if the recent economic performance is sustained then equity markets should rebound from the recent weakness to enjoy strong returns unless wage growth starts to eat into profit margins. Investor confidence has however taken a strong knock and will take time to recover.

Equity style update

Appetite to find clever ways of beating the equity market remains undiminished and so the pursuit of lower cost *smart betas* is still strong (and the cost of playing these themes via ETFs continues to fall). These are style filters no smarter than was the designation, thirty years ago, of *value* and *growth*. Chart S1 updates on the relative performance of four common global *smart betas*: quality, high dividend yield, momentum and minimum volatility[1] (risk). Yield and volatility have languished in recent months as investors favoured a growth perspective. Momentum has been a positive theme until the recent blood-letting.

Chart S2 captures the performance of small cap, growth and value themes. Gyrations in small cap (largely driven by weightings in the US), have reflected the markets' assessment of whether Trump will be able to deliver on his election promises; optimism on this front has improved in recent weeks. Consolidation in oil prices and sustained appetite for growth stocks has been reflected in the relative performance of value stocks.

Chart S1: Performance of equity styles (vs MSCI)

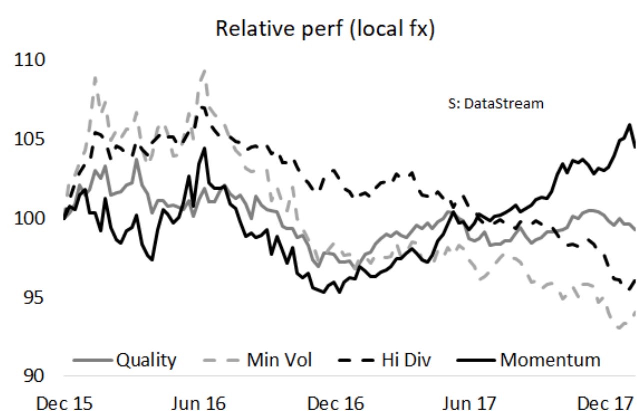
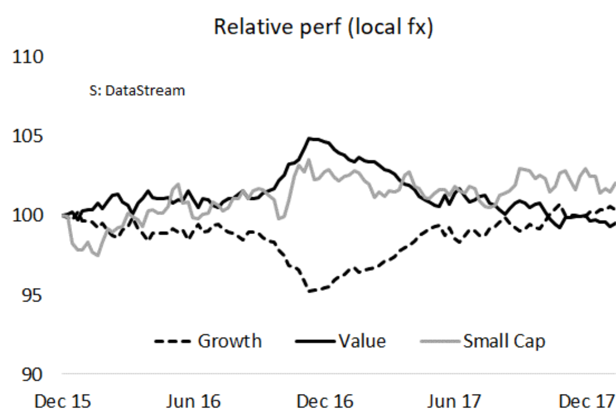
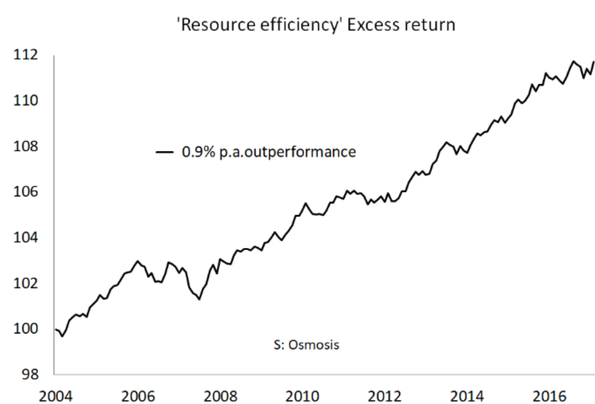


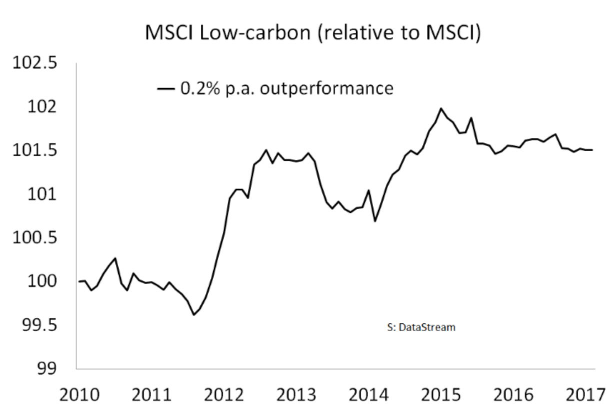
Chart S2: MSCI Growth vs Value relative



The strength of demand for growth and momentum plays together with rising bond yields has seen investors mark-down income as an investment theme in both the US and Europe. Nonetheless the Fund is recommended to sustain a strong weighting to equities characterised by robust dividend yields and solid dividend growth. As we are seeing, market conditions don't always stay supportive of 'risk'.

There are numerous ways of playing the sustainability theme; an example is one that favours those companies that are demonstrably better[2] at managing their water and energy inputs and waste outputs. The next chart plots the relative performance of this portfolio (relative to the MSCI). Shown alongside is the





[1] In practice, this 'style' captures those stocks which tend to have high levels of free cashflow yields.

[2] As disclosed formally in their regular company reports.

excess return from the MSCI 'low carbon' index. Thus far, the more complete approach (water, waste and energy) has delivered superior and more stable excess returns[3].

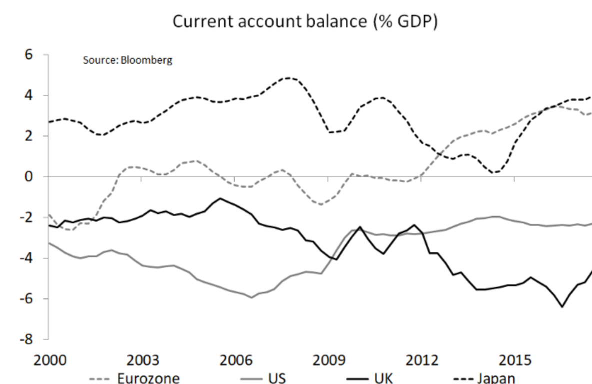
A resource efficient tilt to global equities is an attractive alternative to a holding in a global equity index implemented passively and superior to simply focusing on minimising a carbon footprint.

Currency markets

Recent currency swings have been driven less by overt policy manipulation and more by growth contrasts; the € has risen in line with unexpected levels of real economic growth while the US economy initially lagged forecasts. The associated rebalancing has benefitted the world economy however Trump's anti-free trade stance is beginning to generate concern.

Consistent with the growth transfer is the operation of external deficits and lower surpluses; current account imbalances exert a strong influence on currency trends when other, more fleeting, drivers subside. Chart FX1 highlights the strong creditor nature of the Eurozone and Japanese economies as well as the UK's need to attract international capital inflows to 'balance the books'.

Chart FX1: Current account deficits (% of GDP)



It should be noted that the UK's substantial current account deficit has improved recently but the deficit, as % of GDP, remains significant. The UK has been able to attract international capital despite the relatively low yields on offer. Higher yields in the US could emerge to 'crowd' out the UK; if so, £ would need to weaken.

£ is still low (Chart FX4) but may languish around current levels given the *Brexit* overhang, the absence of fresh economic stimulus from fiscal policy and the relatively weak economic outlook (Table 1). Political developments in the UK have the potential to change the landscape for £ considerably.

Chart FX2: £ Trade-weighted Index

Chart FX3: US$ Trade-weighted Indices

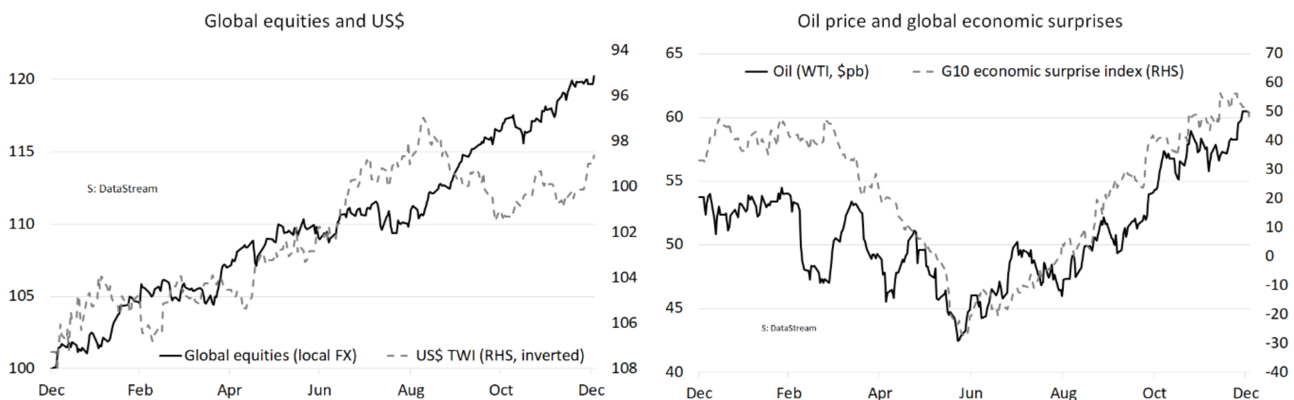
[3] Excess returns are perhaps to be expected; companies which minimise their input and output costs (associated with waste, water and energy) are probably better managed companies.

Commentary

Equity ('risk') markets performed very well in 2017 and much better than people expected when the year began. In many cases, indices attained all-time highs repeatedly throughout the year and the US equity market never fell in any calendar month in 2017; the local currency return of global equities was just over 20%.

The platform for these gains was formed, across the globe, by stronger and much more synchronised economic growth than expected, a related strong improvement in corporate earnings and a benign monetary policy response from Central Banks (shaped by still low inflation and evidenced by the slide in the US projected equilibrium policy rate to just 2.8%). A fourth, important factor was the failure of politics, in Europe most notably, to generate a sustained de-stabilisation. Despite unexpected developments in Spain, Austria and the UK, Macron's victory in France proved that stable politics at the core of Europe is all that matters. Investors were also reassured by Trump's repeated failure to turn bluster into policy, what he did manage was to deliver his promised, and welcomed, tax reform.

In what was to be repeated in 2018, the year began with equity investors hoping for positive economic data but braced for the higher bond yields that would come as a result. In the event, the emerging economic releases – led by the US, proved weaker than economists predicted and energy prices went lower. Bond yields fell as traders were caught 'short' helping valuations in equity markets to expand. By the time that Macron had won the French elections the economic tide was starting to turn beginning a sustained phase of positive economic surprises across the globe with the lead coming from Europe; Europe had once again become an investable area. Corporate earnings quickly followed suit allowing equity prices to move higher in tandem with the economic data. As the year ended, equity markets were given fresh impetus from Trump's US tax reform; investors entered 2018 in good spirits.



One feature of 2017 was the downshift in the US$. A weak $ is often associated with a brighter global economic outlook and this was the backdrop of 2017. Previous US$ strength had, in part, been driven by a paucity of attractive investment opportunities elsewhere. As a result, when the world outlook improved there were substantial cash balances 'parked' in the US$s available for investment elsewhere. These US$s flowed into Europe (as investors rebuilt positions), Japan and, perhaps most notably, emerging markets; EM equities returned 40% over 2017 to a $ based investor.

History suggests that the recovery from a financial shock typically takes around ten years. The 'Credit Crunch' arguably began early in 2007 when HSBC announced problems with its sub-prime mortgage lending subsidiary Household International. In 2017 the world economy looked to be finally pulling out of the deep malaise that followed. Wary of spoiling matters just as things were starting to improve, the world's major

central banks exploited subdued inflation data to talk soft on policy rates; cash was not going to emerge as a viable competitive alternative to equities.

Taken together, the factors described combined to create a very benign platform for risk assets and equity indices went better as a result. Momentum strategies outperformed and defensives lagged – *who needs defensives when things are this easy?!* This virtuous circle ground to a halt in early February.

Looking ahead to 2018, investors began by expressing heady optimism about global economic growth (broadly based and above trend) and corporate earnings growth; the scope for 2018, however, to deliver upside surprises is much reduced from a year ago. Growth forecasts for the early part of the year for the Eurozone and US (at 4% and above) have invited speculation that the policy response will prove much less benign especially if wage growth and inflation continue to rise. US long-duration bond yields have already moved higher as a result; above 3%, bond yields are beginning to look attractive and now need US dividends to grow by more than 7% if equities are to be preferred. Boosted by tax reform this may well be delivered this year but this is a non-recurring boost to demand. A further factor likely to lead to higher equity market volatility is the rising price of oil.

In summary the world economy looks well placed to perform well in 2018 particularly if companies deliver a boost to capital investment (corporates had become serial under-investors since the GFC). A good part of this good news has however been priced by equity investors and the tussle between opportunities and risks has become much more two-way. Defensive growth strategies should recover ground in 2018 as a result.

Scott M Jamieson, February 2017