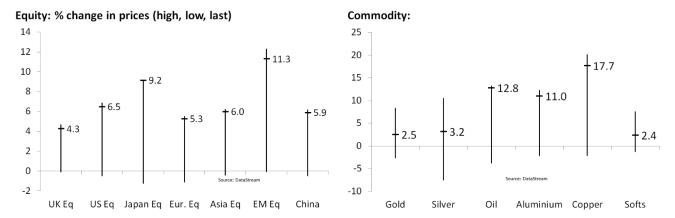


Market Backdrop

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

Market Movements

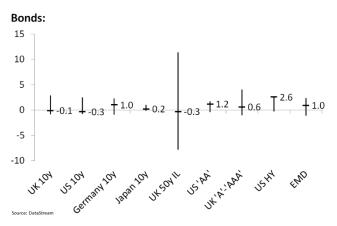
The figures below describe the % performance of various markets from the end of Q2, 2017 to the close on 23rd October 2017 and the range of performance over that period.

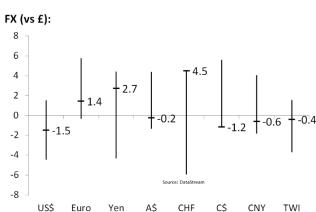


Equity markets have continued to their solid progress in 2017; Q3 saw world equities, in local currency terms, return 4.5% and are currently sitting at their highs. Boosted by solid and synchronised economic growth across the globe, nurtured by still-accommodative central bank policies, regional performance has been strongest in EM and the Japan; the other markets aren't far behind. China has lagged in recent quarters as domestic credit tightening impacted sentiment, not so since end June.

Commodity markets have also enjoyed solid gains over the past four months with those directly associated with industrial activity performing best. Industrial metals benefitted from Chinese production curbs (associated with anti-pollution measures). Precious metals have seen modest gains (on a lower US\$) while 'softs' have generally traded in modest ranges (by their standards) and seen prices defined most by the vagaries of the weather.

Bond markets have been generally calm except for ultra-long UK index-linked bonds which have been characteristically volatile. Despite the progress made by risk markets and good economic growth numbers, bond yields have remained stable or fallen slightly. Those bearish of equity markets require a viable alternative – developed-currency bond markets continue to fail to offer that; yields remain ultra-low (and, mostly, below those on equities). High yield markets benefitted from the better energy prices and strong investor interest helped by marked shrinkage (mostly on credit upgrades).







The Pound trade weighted index (TWI) ended the period down slightly having enjoyed strength earlier in the summer. £ is cheap and with little hard news around Brexit it moved higher on signals from the Bank of England that base rates could be lifted (to address rising inflation). Later in the period infighting within the Government around its leadership returned to cap £. The US\$ broad trade weighted index compounded a 3% and 2.5% declines in Q1 and Q2 respectively with a 2.3% fall in Q3.

Across all markets observed volatility, outside UK IL, remains low by historical standards.

Consensus expectations – economic growth and inflation

The consensus outlook for real economic growth in 2017, having firmed in H1, has drifted slightly in recent months in the EZ and UK, improved in Asia and held steady in the US; for 2018, there have been selective improvements. The Eurozone has seen the largest correction largely due to the expected impact of a stronger € (it has risen by 6% on a trade weighted basis in 2017); domestic demand is however projected to improve. Although the US is expected to grow above trend (estimated by the FOMC to be 1.8% p.a.), the overall outlook for the rest of 2017 and into 2018 is for global growth to remain moderate but solid by comparison with the experience of recent years. Importantly, the current, and prospective, growth backdrop is well-balanced across the globe. At the time of writing leading indicators of activity − particularly those based on 'soft' survey data, are improving; conditions for Q4 look good.

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

	2016	2017	Change since end Q2	2018	Change since end Q2
US	1.6	2.2	0	2.4	0.1
Eurozone	1.7	2.1	-0.2	1.8	0.2
UK	2.0	1.5	-0.1	1.3	0
Japan	1.0	1.5	0.2	1.1	0.1
China	6.7	6.7	0.1	6.4	0.1

In the near term the Atlanta Federal Reserve estimates that Q3, 2017 US GDP growth was 2.7% (annualised rate); continuing the recovery from the muted performance of Q1. Similar measures for the European economy suggest annualised growth of 2% and 3% respectively for Q3 and Q4. Despite the onset of credit tightening, the Chinese economy remains firm — at least that is what the official statistics suggest. Uncertainty surrounding the *Brexit* negotiations will ensure that the projections for the UK remain subdued. If the forecasts are correct, UK growth of 1.3% next year will disappoint those looking for rising living standards and some relief from austerity measures.

The outlook for inflation in 2017 and 2018 has generally softened over the summer (Table 2 overleaf). The main take-away remains that inflation, 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. In reality, 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.

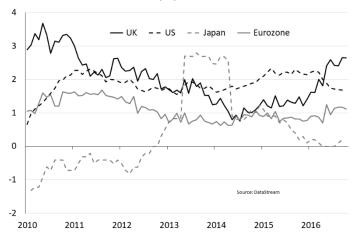


Table 2: Consensus forecasts – Inflation (CPI, %)

	2016	2017	Change since end Q2	2018	Change since end Q2
US	1.7	1.5	-0.2	1.7	-0.3
Eurozone	1.1	1.5	-0.1	1.4	-0.1
UK	1.6	2.7	0	2.5	-0.1
Japan	0.0	0.5	-0.1	0.7	-0.1
China	2.1	1.7	-0.2	2.2	0

Currently, core inflation rates in the major economies have been low or falling (Chart 1 below). The exception is the UK where the impact of the recovery in energy costs (indirectly impacting the core rate) and the sharp fall in £ seen in 2016, continues to feed through. Japan's inflation problem remains the lack of it – although there are signs that a return to deflation is unlikely. Japan's Prime Minister has recently won a snap election (exploiting the weakness of the Opposition); *Abe-nomics* - which targets higher inflation - looks set to continue.

Chart 1: Core CPI rates (%, yoy)



In the UK, the latest data brought higher headline retail and consumer price inflation (Chart 2). Ten years after the last base rate hike, the scene is being set by the majority of those on the Monetary Policy Committee for such a move later next month.

Chart 2: UK inflation rates (%, yoy)

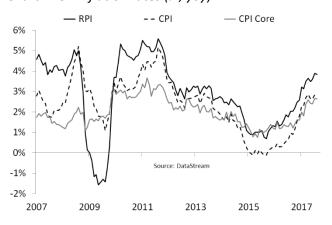
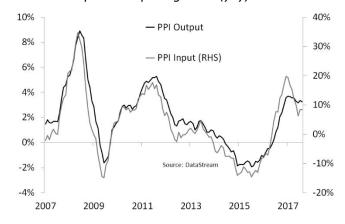


Chart 3: UK producer price growth (yoy)





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, are allowing this phase to develop. Should economic volatility return, for whatever reason, this process would quickly stop.

Short and long term interest rates

Having hiked rates again in June (to 1.25%) the US Fed kept rates on hold at their most recent meeting (though did announce that they would start to unwind QE – by reducing the quantity of bonds they own). The market generally expects US rates to rise again in December. In the context of the past forty years, US interest rates are still effectively zero and, in real terms, still very accommodative. FOMC members recently reduced the projected neutral policy rate to 2.8%; monetary policy might normalise but this will be to a 'new' normal. This projection suggests that the equilibrium longer term real interest rate is 0.8% and implies that US 30-year inflation protected bonds are, currently, fairly priced.

The current consensus forecast for the main policy settings are shown in Table R1. Despite the recent strength in the European economic policy everywhere outside the US is mostly expected to remain on hold. Initial moves to normalise in Europe would likely come via reductions to the ECB's balance sheet. A tentative rise in UK rates — unwinding the emergency cut delivered in the aftermath of the EU Referendum - is suggested; the market does not sense the start of a trend.

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

	2016	Latest	2017	2018
US Fed	0.75	1.25	1.50	2.00
ECB	-0.40	-0.40	-0.40	0.00
ВоЕ	0.25	0.25	0.45	0.50
BoJ	-0.10	-0.10	0.00	0.00

Longer term, in the US rates are expected to rise slowly to the terminal rate (2.8%). In other words, by the end of this year, half of this rate cycle is projected to have been completed. If so then this introduces the concept of a protracted pause at some stage. Some investors will sense an end to rate hikes.

The outlook for longer dated bond yields is shown in Table R2; yields are expected to rise modestly into the year end in response to the policy rate, on sustained economic growth and a recovery in inflation. The situation is the US is complicated by the Fed starting to shrink its balance sheet; hard details on the schedule for this will emerge over H2. Nowhere will yields get 'high'.

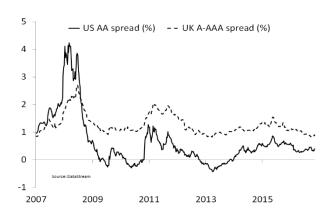
Table R2: Consensus forecasts – ten-year bond yields at year end (%)

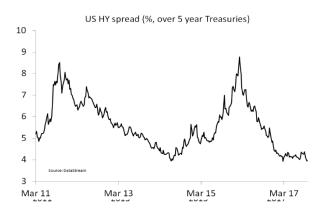
	2016	Latest	2017	2018
US	2.4	2.3	2.7	2.9
Germany	0.3	0.5	0.7	1.0
UK	1.4	1.3	1.4	1.6
Japan	0	0.1	0.1	0.1



Non-Government Bonds

Investment grade bond spreads remain tight; spreads need to rise substantially to make them compelling. That said, retail demand for IG bond funds remains very strong (as investors continue to adjust to likely timescale over which cash rates will remain very low). The same is true of high yield bonds where the spread is around multi-year lows. Corporate bonds are benefitting from the support that the government markets have delivered through 2017.





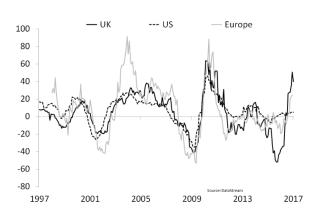
Regardless of which emerging market debt index is followed, all have completely recovered from the Trump-induced sell off last November. In a world of still wafer thin developed bond yields, investors continue to find EMD attractive – there is nowhere else to go for yield.

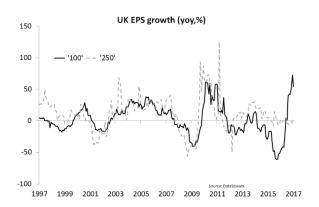


Equities

The chart 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 impact of last year's £ weakness on the earnings of the larger UK companies is clear to see. Note that U.S. corporate earnings just posted their first back-to-back double-digit quarterly advance in six years.

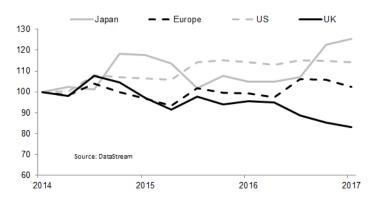
Charts E1: Experienced earnings per share growth





EPS forecasts for the next financial year register an improvement in Europe as analysts react to the relatively buoyant conditions of 2017; weakness, evident in the outlook for smaller companies, is expected in the UK once the currency affects wash out. The prospects for Japan have risen (Chart E2) supporting the recent strength of the Nikkei.

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



Looking beyond the next financial year, equity analysts generally remain optimistic despite a modest markdown over the summer (Table 5); although 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% (-1%)	11% (-1%)	6% (-1%)	8% (-1%)
FY3	8% (-2%)	10% (0%)	8% (0%)	9% (0%)

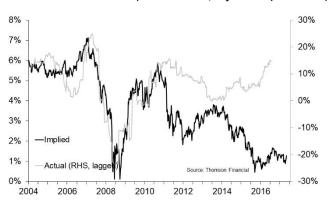


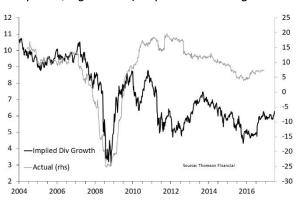
Equity Valuation

A preferred means of assessing how attractively priced are equities draws upon the implied level of dividend growth required to generate the same returns relative to the alternative of investing in bonds. In both the UK and US markets (Charts E3 and E4) the required level of long-term dividend growth looks to be modest in absolute terms and against what has been delivered; low bond yields 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. US equities have seen the breakeven dividend growth lift in recent months.

Overall, while the interest rate outlook may have become more uncertain, equity markets still offer better value than bonds.

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 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. Should the fiscal spigot ever open then there may be bargains to be had in UK domestic plays; sector baskets bought on 'bad days' may be the best way to exploit these. We await the detail of the next Budget.

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

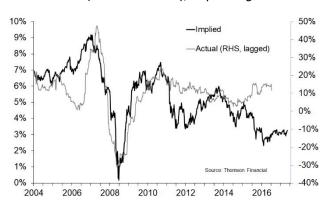


Chart E6: Regional PE ratios



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 government or corporate bonds.



Regardless of how it is delivered, if the recent economic performance is sustained then, with central banks increasingly able to contain bond markets, equities should enjoy strong returns — at least while investors expect there to be a strong correlation between growth and corporate profitability.

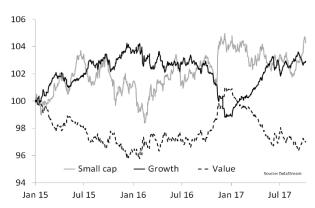
Equity style update

Appetite to find clever ways of beating the equity market remains undiminished and so the pursuit of lower cost *smart betas* is strong (and the cost of playing these themes via ETFs is plunging). In reality, 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 three common global *smart betas*: high dividend, momentum and minimum volatility¹ (risk). Yield and volatility have languished in recent months as investors favoured a growth perspective; Chart S2 captures the performance of small cap, growth and value themes. Momentum has been a positive theme all year. 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



A preferred style is a variation of the higher yield style – those companies with a long track record of growing dividends across multiple economic and market cycles; not high yield but robust (or resilient) payers (the chart opposite plots the recent performance of 'robust' yield payers in Europe and US (vs local market)).

The strength of demand for growth and momentum plays 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

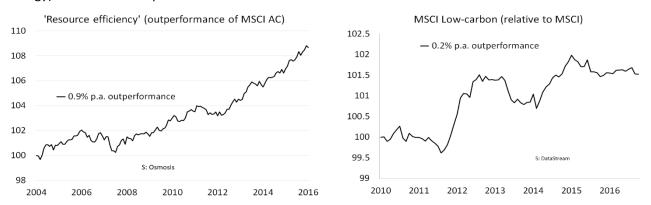
1.15 1 1.5 1.10 2 1.05 2.5 1.00 3 0.95 3.5 Oct 13 Oct 14 Oct 15 Oct 16 Oct 17 —EU Robust vs Mkt —US Robust vs Mkt —US 10y Bond Yield (%, rhs, inverted)

dividend yields. Market conditions will not always stay so supportive of 'risk'.

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



There are numerous ways of playing the sustainability theme; an example is one that favours those companies that are demonstrably better² 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 excess return from the MSCI 'low carbon' index. Thus far, the 'three pronged' approach (water, waste and energy) has delivered superior and more stable excess returns³.

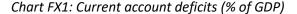


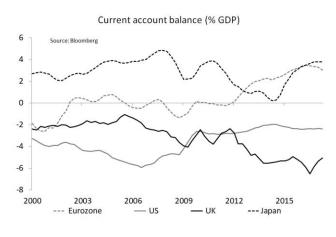
A resource efficient tilt to global equities is an attractive alternative to a holding in a global equity index implemented passively and superior to simply focusing on minimising a carbon footprint.

Currency markets

Rolling (competitive) currency devaluation has been a strong feature of the FX landscape in recent years as attempts to revive domestic economies from within have floundered/failed. This year currency swings have been driven less by overt policy manipulation and more by growth contrasts; the € has risen consistent with unexpected levels of real economic growth while the US economy initially lagged forecasts. The associated rebalancing has benefitted the world economy.

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'.





² As disclosed formally in their regular company reports.

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.



It should be noted that the UK's substantial current account deficit is not yet putting upside pressure on domestic yields (necessary ultimately to attractive international capital).

Although the US economy has strengthened as the year has progressed, it has not brought an improvement in the US\$ (Chart FX3). In large part, this has been due to the ongoing rehabilitation of Europe as a sensible place to invest; the € remains a strong consensus long – the consensus can be correct, for a while.

£ is cheap (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 and it is widely believed that should a full leadership contest develop then £ will weaken.

Chart FX2: £ Trade-weighted Index

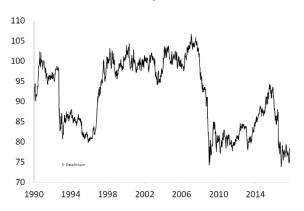


Chart FX3: US\$ Trade-weighted Indices

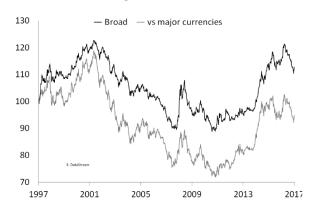
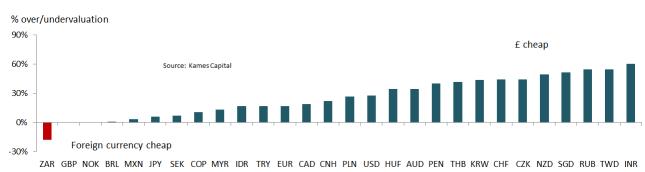


Chart FX4: FX valuation vs £ (on PPP basis)

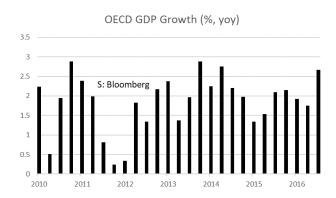


Note: Under PPP a trend or neutral exchange rate is derived and evolved per shifts in inflation rate differentials. Spot currency levels are then compared against this neutral exchange rate – where the inflation adjusted cost in goods and services should be equivalent in both countries. On this basis, the Indian Rupee and Rouble are currently very expensive relative to £ while the South Africa Rand is cheap. It must be remembered that valuation measures such as PPP are of little use in determining market movements in the near term. Currencies can and do remain misaligned for extended periods.



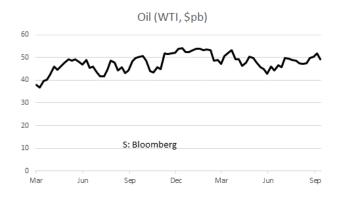
Commentary

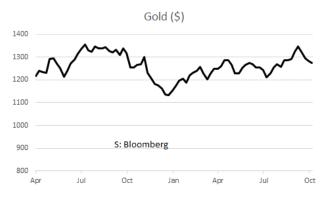
Confounding the expectations of many, 2017 has produced a solid platform for 'risk' investors. Economic growth, across the OECD, has improved with growth, in Q2 and led by Japan and the Eurozone, particularly buoyant and well synchronised. Encouragingly, the outlook for the rest of the year — captured in leading indicators and economic surprise measures — looks set fair.



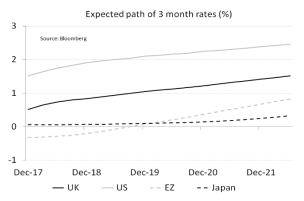


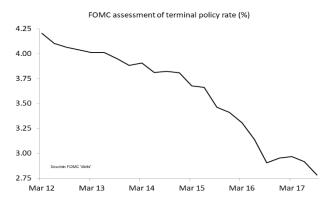
Despite very healthy reserve levels, energy prices have range-traded capped by shale production that can be turned on and off at will and supported by firm global demand. This stability has delivered welcome certainty for producers and consumers of energy alike. Meanwhile monetary conditions — captured in the Gold price - have been equally stable.





Despite the positive activity backdrop, inflation – whether driven by excess capacity, technology or demographics - has remained very subdued staying – in most countries – below levels that could cause monetary policymakers alarm. Indeed, for some, weak inflation remains the concern. This has allowed short-term interest rates – current and projected into the next decade – to remain incredibly low by historic standards. Most central bankers wish to exploit the constructive economic backdrop to normalise monetary policy – by reversing quantitative easing and/ or moving policy rates away from the zero-bound. Ordinarily





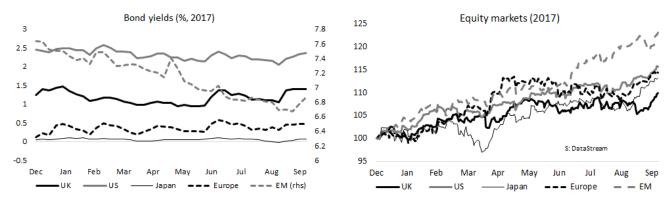


this might have destabilised longer duration investments however there is a strong sense, led by the US, that the new 'normal' comprises equilibrium interest rates almost half their level before the GFC.

A further significant prop to 2017 has been that capital, previously attracted into the US economy, returned offshore (evident in the lower US\$) - and a little bit of US cash can go a long way elsewhere in the world.

One major uncertainty for investors coming into 2017 - particularly after 2016, was the potential for adverse political developments. In the event and while there have been surprises in the UK, France and Germany, investors have been able to interpret the changes either benignly (Macron represents a far better option than Le Pen and, potentially, a force for good) or as a sideshow (May's UK election debacle).

Solid, broad-based non-inflationary demand nurtured by still accommodative monetary policies has kept bond markets stable and allowed equity markets to make excellent progress in 2017. Although there has been a few – fleeting – opportunities to prefer one of the US, European or Japanese equity markets over the others, over the piece they have done equally well.



With the UK equity market languishing for reasons of its own making, emerging markets have taken pride of place leveraging off solid developed economy growth as well as enjoying the benefits of their own maturing economies; technology sectors having been particularly buoyant.

What of the rest of 2017 and beyond?

Returning to the leading indicators, the growth outlook looks constructive. The surge in activity in Europe and Japan in Q2 faded a little recently while the US economy has picked up the pace after a sluggish start to the year (something that has become the seasonal norm). With the Chinese economy showing itself likely to take (constructive) credit tightening in its stride, globally, demand levels look secure.

As mentioned above, energy prices – often a 'banana skin' on which the world economy has trod – look well-contained and unlikely to sponsor either a surge in inflation or a contraction in producing nations. If Gold is the 'canary' for future inflation, investors can sleep easy; monetary instability likely to push monetary policymakers onto the front foot looks a very low risk.

Even the prospect of the US Federal Reserve reversing its QE has done little to upset bond investors who are reassured by the prospect of very low cash rates and falling equilibrium rates. Longer duration bonds may look poor value by historical standards but against the alternative of current – and prospective – deposit rates see their attraction is clear. Developed country bonds as a result look unlikely to emerge as a competitive alternative to equities – and without a viable competitive alternative, investors will continue to prefer equity markets – for growth <u>and</u> yield.

Within DM markets there are pockets of interesting opportunities – but these are often characterised by illiquidity – from which many investors shy-away – or are either too 'off-piste' or too small for their



mandates. Beyond these, market enthusiasm for investments in emerging economies is easy to understand – and project forward. Recent research has highlighted that spending on R&D across EM countries now exceeds that of the US and Europe. Emerging economies have a lot to commend them and perhaps need worry only about a significant DM contraction that hits all appetite for risk— as mentioned that looks unlikely in the period immediately ahead.

This leaves the threat of renewed strength in the US\$ - which could 'starve' the rest of the world of capital or (geo-)political shocks. We can't usefully predict the latter – we can be prepared to react quickly and sensibly – while the former risk looks low while the economies of creditor nations continue to flourish. It seems reasonable therefore to expect recent performance trends to continue until economic growth starts to wane (not soon), valuations get ridiculous (not yet) and central banks tighten monetary conditions too much (unlikely). Stay long equities.

Scott M Jamieson, October 2017

