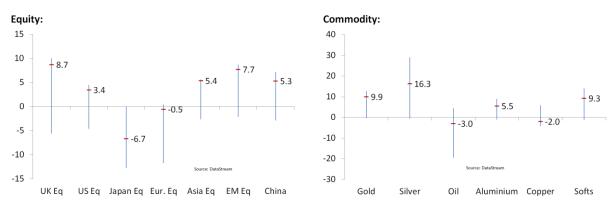
Market Backdrop

This note is intended to support the discussion at the upcoming meeting of the Hillingdon Pension Fund (HPF) Pension Committee.

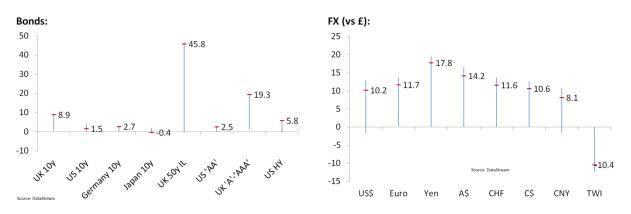
Market Movements

The figures below describe the % performance of various markets from the end of May to 26 August 2016. As an example, UK equities have risen by 8.7% over the period having been 10% higher and 5% lower in the interim; markets have been lively.



Equity markets generally traded in a 10-15% range hitting their lows on the day of the UK Referendum result; since then, Japan and Europe apart, indices have moved to reach period highs. The UK market, supported by currency depreciation and a sense of relief, has posted strong gains. Supported by easing credit conditions, Chinese equities have also performed well.

Commodity markets have been mixed. The environment was positive for precious metals (built out of the return of more expansionary policies in Europe, Japan and now the UK) while softs rose mostly on weather effects. Oil prices have traded in a 25% range hitting a low point just 3 weeks ago before rallying on hopes that stockpiles will start to reduce and that an OPEC accord (to limit production) will emerge.



The UK apart, bonds generally traded in ranges and delivered performance consistent with their historic norms. Despite standing on already very low yield levels and fuelled by the easier monetary stance being adopted by the Bank of England, the gains on ultra-long UK index-linked bonds and corporate credit were spectacular – unfortunately this implies a similar increase in the value of the HPF's liabilities. US high yield returns were led by the recovery in sentiment within the energy related portion of that market.

The Pound trade weighted index (TWI) fell sharply following the Referendum across the board as traders absorbed the prospect of a recession in H2 and the 'compensation' arguably required to offset the UK's

external deficit. Safe-haven attributes (particularly its current account surplus) saw the Japanese Yen rise sharply (hitting Japanese equities)

Consensus expectations - economic growth and inflation

The economic outlook as we entered 2016 was broadly constructive. Growth in the US and UK was expected to stabilise (at levels above trend potential) and modest increases in activity were expected in Europe (as the supportive conditions of 2015 persisted) and also in Japan (as policy stimulus was added).

The first table below details the latest consensus forecasts¹ for real growth across the major economies for 2016 and 2017. The changes to these forecasts over 2016 are detailed; with the exception of China, expectations for 2016 have experienced a broad write-down. The constructive tone has gone.

The UK economy is judged to be impacted quite heavily by the decision to leave the EU even though there is no timetable for departure; the impact is seen most clearly in the forecasts for 2017 when very limited growth is expected. It is this backdrop and survey evidence pointing to increases in unemployment that has encouraged the Bank of England to ease monetary conditions. The current account deficit remains the key point of weakness for the UK.

The US economy in Q1 repeated the lacklustre performance of the fourth quarter of 2015 to register growth at an annualised rate of just 0.8% and initial estimates for Q2 suggest growth of just 1.2% with only consumer demand supporting activity.

The Japanese economy continues to be highly dependent on fresh policy stimuli; Japanese policymakers have surprised markets in the past year with their lack of new measures. Some adjustments have been announced – most notably the deferral of the next VAT hike until ahead of the Tokyo Olympics (when Games-induced activity is expected to be strong). The recent success for the ruling party in the Upper House elections is being followed by a fresh wave of *Abenomics*. Investors will hope that the impact lasts longer than the previous package particularly in terms of lifting wages but, with the fiscal stimulus suggested to be limited to 1% of GDP, there is scope for disappointment.

Chinese growth rates have stabilised in response to fresh policy relaxation, a (slightly) lower exchange rate and higher levels of public spending. The challenges facing China (in its Property and credit markets) remain acute; currency devaluation is set to remain a central part of their remedial efforts.

	2015	2016	Change since end 2015	2017	Change since end 2015
US	2.4	1.5	-1.0	2.2	-0.2
Eurozone	1.5	1.5	-0.2	1.2	-0.5
υκ	2.2	1.6	-0.7	0.6	-1.6
Japan	0.6	0.5	-0.6	0.7	0.1
China	6.9	6.5	0	6.3	0

Table 1: Consensus forecasts	– Real GDP growth (%)
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The world economy remains 'tired'. Debt levels have grown since the crisis of 2008/09, demographic trends are lifting provision costs with plunging solvency levels drawing capital away from more productive uses and surplus capacity has been added when shrinkage was required. Central bankers have made various calls to

¹ Based on a range of forecasts provided by economists to Bloomberg as at 26 August

governments to support their efforts through a more expansionary set of fiscal policies; hitherto these calls have been ignored. The new UK Government, working to support the domestic economy through the spasm of *Brexit*, may prove to be the major economy to deliver fiscal support (to the relaunch of QE and lower base rate). Overall, a growth surge looks highly unlikely but a period of better reports is possible. More than anything, the world still needs a faster pace of economic growth.

The outlook for inflation in 2016 is for prices in the EU to rise at a marginally slower pace - this is consistent with the slower GDP growth rates expected (Table 2). The sharpest adjustment for 2016/17 has occurred in Japan where inflation forecasts have been slashed; a far cry from the much heralded 2% target of *Abe-nomics*. The reasons for the downshift are principally the unexpected and (for Japan) unwelcome rise in the Japanese Yen and, related, the weaker path of economic growth. In the US the outlook has changed little due, in part, to the resilient labour market – jobs are still being created. UK inflation in 2017 is expected to get a lift from the weaker exchange rate.

	2015	2016	Change since end 2015	2017	Change since end 2015
US	1.3	1.7	0.1	1.8	0
Eurozone	0.1	0.3	-0.7	1.3	-0.2
UK	0.1	0.7	-0.6	2.2	0.4
Japan	0.8	-0.1	-0.9	0.7	-1.3
China	1.5	2.0	0.3	2.0	0

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

The main take-away remains that inflation, this year and next and out-with the UK, is not expected to attain central bank targets. It will be interesting to learn whether the UK experiences a significant period of importled inflation; long term UK history suggests that it will. International experience since the financial crisis suggests otherwise.

While projected inflation rates (many years ahead) may cause central bankers some concern, actual inflation is unlikely to be a problem and should not influence the general asset strategy for the Fund. That said, some specific measures may be required if the fiscal taps are turned on.

Short and long term interest rates

Arguably, the most significant interest rate market development in 2016 has involved policymakers in the UK and the US (in particular). Markets have not given the US Federal Reserve permission to validate their projected profile for the Fed Funds Rate - expectations of higher US policy rates in 2016 have all but evaporated, and any thoughts of a rate hike in the UK have been dashed following the recent 0.25% cut in base rates (Table 3).

Table 3: Consensus forecasts – main policy setting at year end (%)

	2015	Latest	2016	2017	
US Fed	0.38	0.38	0.65	1.25	

ECB	-0.30	-0.40	-0.40	-0.40
BoE	0.50	0.25	0.15	0.15
ВоЈ	0.10	-0.10	-0.10	-0.20

In Europe, policy rates have been moved further into negative territory. While the actual Eurozone rate is not at the low maintained in Switzerland (-0.75%), the ECB have suggested that it will be difficult to move lower. Given the problems of the Italian banking industry, further reductions are possible.

Longer term bond yields have fallen sharply this year (Table 4). Ten-year yields in Europe and Japan have breached zero and 33% of all hard currency bonds are now on negative yields; the proportion in Europe is 49%. None of this supports the idea that bond markets will soon normalise.

	2015	Latest	2016	2017
US	2.3	1.58	1.65	2.19
Eurozone	0.6	-0.03	-0.02	0.37
υк	1.9	0.62	0.84	1.15
Japan	0.3	-0.08	-0.19	-0.10

Table 4: Consensus forecasts – Ten year government bond yield at year end (%)

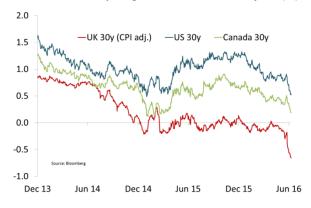
A striking feature of bond markets this year has been the rapid acceleration in the downshift in long duration yields. The plunge in long yields in Germany and Japan has brought 0% into reach which would have been unimaginable even just a few quarters ago. *Brexit* may have exacerbated the move but the trend was already in place. Markets in the US and UK maintain a broad premium to the Eurozone and Japan but it is to be supposed that if the MPC and Fed were to relaunch QE then the lower levels would become a market target.

These moves have been fully reflected in the inflation-protected bond markets (Chart B1). The yield on ultralong UK index-linked bonds is now minus 1.5%. To illustrate the impact of this, consider that the price of the longest dated UK IL bond is currently 232. If inflation were to be zero for the next 52 years then the Government of the day will give you back just under 105. That's just 45p in the £; mind you, will have received about 6p in interest, in total, between now and 2068!

Unless inflation is going to return with a vengeance and with all the monetary accommodation of recent years that cannot be discounted, the real yield markets are in a bubble. The problem with bubbles is that valuation considerations have long since gone – there is little fresh challenge to real yields of -2.5% from those that can be levelled at -1.5% (but the consequences on the likes of pension funds are significantly different).

The time will come for a career-defining sale of government bonds. The trick will be to know when that is!





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Equities

In assessing the outlook for equity markets it is useful to examine the trend in consensus forecast earnings per share (EPS). The chart below details how the EPS for the UK, US, European and Japan equity markets have evolved over the past twenty years; they chime with the economic cycle. Generally, corporate profits growth since the end of the financial crisis has been much less spectacular than the lift in indices would suggest. The slip in £ looks to be allowing some recovery in earnings – apparently at Europe's expense. Falling earnings has been an issue in the US in recent quarters; a return to rising eps has recently taken place.

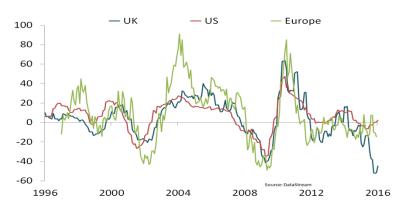


Chart E1: Experienced earnings per share growth

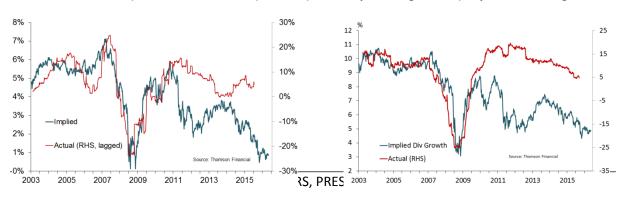
Looking beyond the next financial year, equity analysts generally remain optimistic (Table 5); although it should be remembered that analysts are rarely pessimistic and that they failed to spot the weakness shown in Chart E1. In Japan, estimates have risen (after previous weakness); elsewhere estimated growth has consolidated.

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

	UK	US	Japan	Europe
FY2	16% (u/c)	13% <mark>(-1%)</mark>	10% (+1%)	13% (-1%)
FY3	13% (+1%)	12% <mark>(-1%)</mark>	8% (+1%)	11% (u/c)

There are numerous ways of valuing equity markets. A preferred measure is the implied level of dividend growth required to break-even relative to the alternative of investing in bonds (Charts E2 and E3). In both the UK and US market the required level of long-term dividend growth looks to be modest in absolute terms and against what has been delivered.

The earnings backdrop may recently have been challenging but equity markets should still be preferred to bonds.



Charts E2 and E3: UK (FT All Share, left chart) and US (S&P Composite, right chart) implied dividend growth

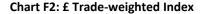
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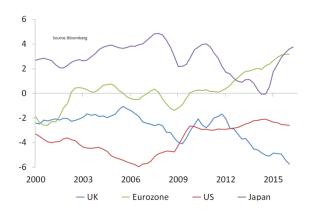
Foreign currency markets

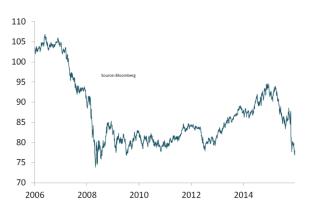
Competitive currency devaluation has become a dominant feature of the FX landscape in recent years as attempts to revive domestic economies from within have floundered/failed. The associated growth rebalancing has merit while those economies being competed against are able to take the strain. As 2016 has shown it became increasingly clear that the UK and the US were struggling to carry the burden of supporting global growth. Consistent with the growth transfer is the operation of external deficits/ lower surpluses. Unfortunately those seeking external demand support – the Eurozone and Japan - already operate substantial current account surpluses (Chart F1); this is where the competitive devaluation logic fails. One of the consequences is that when risk appetite falls sharply investors rush to acquire the currencies of surplus nations i.e. the Euro and Japanese Yen. Following *Brexit* the Yen has been particularly strong (the \notin was too close to the event to be regarded as a safe-haven).

June 23rd marked the day when much changed for the UK. The decision to leave the EU saw the £ fall sharply on the foreign exchanges (Chart F2). The external deficit has long been a significant weakness for the UK and one best addressed by a slower domestic economy and a lower currency. Pre-*Brexit*, these conditions were very difficult to generate (for economic and political reasons). The Referendum result has effectively catalysed a 'fast-track' process of adjustment that will initially prove painful but should ultimately restore a better balance to the economy. Whether the overall level of the economy is higher or lower will depend on myriad factors not least the 'divorce' settlement that the country eventually reaches with the EU. In the meantime one thing seems clear: the Bank of England will strive to underwrite currency weakness by keeping policy loose and maintain the significant pricing edge that the UK would now seem to hold (Chart F3).

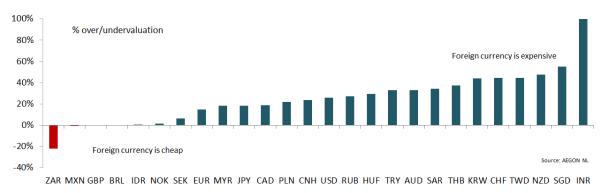
Chart F1: Current account deficits (% of GDP)











Note: Under PPP a trend or neutral exchange rate is derived and evolved according to shifts in inflation rate differentials. Spot currency levels are then compared against this neutral exchange rate – where the inflation adjusted cost in goods and

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services should be equivalent in both countries. On this basis, the Indian Rupee is currently very expensive relative to \pounds while the South Africa Rand is very 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.

Gold

As the currency of last resort and the ultimate store of value, Gold was held as an investment for millennia and obviously long before our modern system of financial and investment markets. Not generating any yield and being hardly portable, its use within a modern balanced portfolio has diminished significantly in the decades past and now few investors, comparable to the Pension Fund, maintain any exposure.

Standing back, the investment case has three forms: as a return enhancer, as a diversifier and as a risk mitigant in times of market stress. Gold has proved to be most useful when not maintained as a core holding in a balanced portfolio. If economies and markets are thought to be headed for some significant turbulence then a weighting is advisable, especially when the defensive alternative of government bonds are so expensively rated – holding UK 50 year index-linked guarantees a real loss of around 50%.

The price of gold has enjoyed a recovery in recent months. This has been accompanied by an increase in the quantity of gold held by Gold ETFs (Chart G1). A similarly strong relationship exists between Gold and the aggregate market value of gold mining companies (as captured by a miner ETF – Chart G2).

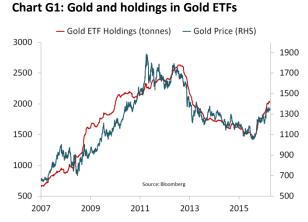
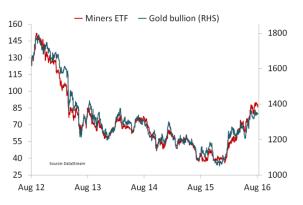


Chart G2: Gold and a gold miner ETF



This turn in Gold has chimed with the progress in long dated US real yields – confirmation that investors have inflation protection in mind (Chart G3). Further, and until recently, Gold has traded inversely with the broad value of the US\$: when the paper currency of last resort falls out of favour, investors turn to Gold (Chart G4).

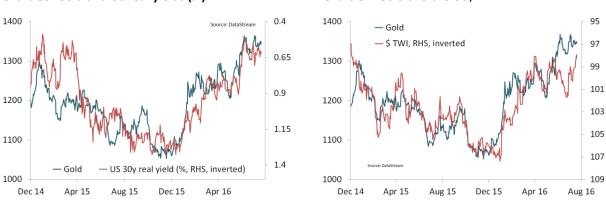


Chart G3: Gold and US real yields (%)

Chart G4: Gold and the US\$

Those who currently favour holding Gold typically believe that inflation will surge (in a belated response to QE etc) or that a monetary disorder, that envelops the US economy, lies ahead. In either of these scenarios it is highly likely that Gold will rise in value – perhaps appreciably. If neither scenario develops - and monetary

policies aren't tightened, then Gold should flat-line. That said, the holding cost of Gold – while interest rates are at current levels – is close to zero.

Given the current backdrop some exposure to Gold remains warranted; Gold 'miners' are a leveraged means of acquiring proxy exposure. A stronger \$ could be a problem.

Style Focus

Appetite to find clever ways of beating the equity market remains undiminished and so the pursuit of so-called *smart betas* is strong. In reality these are style filters no smarter than was the designation, thirty years ago, of *value* and *growth*. Chart S1 describes the relative performance of three common *smart betas*: (traditional) value, high dividend and minimum volatility (risk). Markets continue to reward defensive strategies.

Value has struggled for several years and continues to do so. The 'blame' lies in the need for higher levels of global economic activity to restore corporate performance to a number of erstwhile 'valuable' (cheap) companies. Higher yielding companies have continued to perform consistent with the yield declines seen across bond markets; many of these companies have acquired the designation of 'bond proxies'.

The low risk style remains the standout performer. In ETF form this spans over 300 companies from across the globe with lower than average trailing volatility. Styles derived on trailing price performance normally work well on paper and rather less so in practice; Min Vol has, thus far, defied that generalisation. ['Min vol' typically captures companies with a high free cash flow yield.]



Chart S1: Recent performance of three global equity styles (vs MSCI AC)

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) payers². In recent quarters, proven dividend payers have performed well in Europe; when conditions across the broader market have been tough, investors have favoured the more secure companies. The attractions of resilient dividend stocks have been increased by *Brexit*. In the US, the improvement in the robust style that occurred when it became clear that the FOMC would not easily be able to deliver on their projected policy path has continued. As markets moved to highs recently, investor sentiment toward more growth oriented companies has improved and brought some consolidation in yield themed strategy performance (Chart S2).

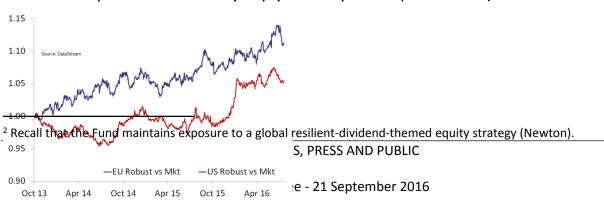


Chart S2: Recent performance of 'robust' yield payers in Europe and US (vs local market)

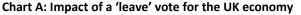
The Fund is recommended to sustain a strong weighting to equities characterised by robust dividend yields.

Feature: Brexit

The UK Referendum has catalysed a very British revolution, the effects of which are only just starting to emerge. This is happening at a time when almost all financial commentators judge equity markets to be expensive or very expensive; although higher valuation multiples can be argued because of the very low level of interest rates, the deterioration evident in corporate profitability (Chart E1) is hard to ignore and challenging to share prices. Almost all shocks to the status quo in markets involve an initial negative reaction. *Brexit* has occurred at a time when the deflation pressures on the world economy were already strong. Bad policy reactions now could easily turn this drama into a crisis. Fortunately, the initial policy response has been encouraging and (much) lower bond yields have delivered strong support to risk markets.

A sample of the forecast impact on the UK economy from it ceasing to be in the EU prepared ahead of the vote is given Chart A. Inevitably, the range of suggested outcomes is wide but the negative bias is clear. Early readings on consumer and corporate sentiment, post the vote, point to a mild recession over H2, 2016; it is premature, however, to conclude too much from readings that may simply reflect knee-jerk reactions.

Fearful of a sharp deterioration in the UK labour market, the Bank of England has recently halved the base lending rate (to 0.25%), restarted asset purchases (of gilts and corporate bonds) and launched a fresh and substantial 'funding for lending' programme. Arguably, they are recognising a key lesson of the post-financial crisis era: policy moves initiated too late or too timidly are wasted. That doesn't necessarily mean that the eventual out-turn will be any better but it is surely worth trying to be more pro-active. The sharp £ currency devaluation (Chart F2) has created the platform for a fast-track attack on the UK's dreadful external deficit (Chart F1). It would have been a huge disappointment if the Bank of England had failed to act to try to lock in this competitive improvement.



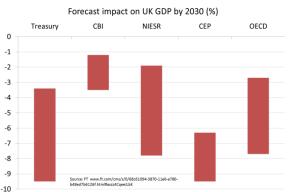


Chart B: UK Large cap, small cap vs All cap and £



At the time of writing the broad UK equity market is

7.3% higher than the close on June 23rd, a change broadly comparable with international indices (in local currency terms). On a narrower basis there has been a huge divergence between small cap and large cap stocks (shown relative to the FT All Share) – Chart B; small caps are more exposed to the domestic economy and investors have moved swiftly to anticipate a mild recession. Curiously the scale of the relative underperformance of small caps initially matched the downshift in £ (which has bolstered the earnings outlook for the more internationally oriented large caps).

Two of the major possible consequences of *Brexit* involve Europe and UK fiscal policy. If the UK's move eventually catalyses similar votes across other member states in the EU and renewed strains emerge within the Eurozone then the continued existence of the € would be in doubt. The way in which the EU deal with the problems in the Italian banking system and that government's plan to inject capital will likely prove a useful test of support for the EU from within.

More positively, if the change of administration in the UK marks an end to the age of austerity – with the government embarking on a fiscal expansion the like of which central bankers have been requesting - then

investor attitudes to domestic corporate exposure would quickly become much more positive than the initial reaction captured in Chart B. The rising optimism surrounding fiscal relaxation is evident in the improvement in the relative performance of '250' stocks in recent weeks.

My wish-list post-*Brexit* would be complete if means are found to relieve the destructive pressure on pension funds and insurance companies from the relentless plunge in long duration bond yields.

There are bargains to be had in UK domestic plays especially if fiscal policy is loosened; sector baskets bought on 'bad days' may be the best way to exploit these.

Summary

Risk markets are enjoying the boost that comes from (much) lower long term discounts rates without yet having to face the hard evidence as to why those rates have fallen. It is to be hoped that we are either at or near the point where electorate unrest forces governments to heed the pleas of central bankers: support our ever more imaginative monetary efforts through fiscal policy. In this sense we may be at the 'make or break' point in the post-GFC era. Against this backdrop risk markets have had a better summer than has been their norm; over the Autumn delivery on policy expectations will prove critical.

One of the features of H1, 2016 has been that despite strong risk rallies, defensive investments (bonds, resilient equity yield plays, gold etc) have conceded little ground. If this continues to be the case then it should be clear that deep underlying concerns remain. In the year ahead these will probably involve some or all of the following:

- China credit, property bubbles and the means by which it detaches itself further from the strong US\$,
- energy prices the oil price has very recently rolled over, sustained weakness would be a problem,
- EU worries centred on longer term impact of the British referendum result, challenges within the Italian banking system (as a test case for any new-found EU flexibility) and the French Presidential election (in 2017),
- policy error emboldened by the level of equities and some better data, the US Fed tighten too quickly
- defaults there emerges a 'tail' to the impact of low oil prices in the US high yield bond market.

Darker scenarios involve investors starting to penalise those markets and economies grown dependent of unbridled quantitative easing and also the highly problematic process by which cash investors try to transition back to their natural habitat from corporate bonds, equities and property. Hopefully, these prove problems for another day.

Scott M Jamieson, August 2016

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