



With commentary from David Stevenson

Crisis averted, again. Investors have been closely watching events in Greece although I'd argue that by the closing stages a general sense of weariness had emerged. Frankly the markets could do with NOT talking about Greece for at least a few months. China has taken top slot as the key debate in recent weeks, with the local stockmarkets in freefall and bears warning that we're mid-way through another enormous increase in leverage and debt which could in turn result in a hard landing for the wider economy. But arguably investors are missing what's the most important story of the second half of 2015, namely interest rates, and the possibility that central banks in the US and the UK might start tightening monetary policy as early as September of this year.

Most analysts don't think any large increases are likely and central bankers have been suggesting that even after any increases, interest rates are likely to stay well below long term averages of around 4.5 to 5%. The consensus is that rates might peak at about 2 to 2.5% although that also suggests that if each incremental increase is in the 0.25% range, we could be in for at least another 4 to 6 rate rises over the next few years. Quite how markets will respond is anyone's guess. On the one hand investors will worry that rate rises might strangle any economic recovery and prompt a general repricing of risk - interest rates are used as a reference point for models such as discounted cash flow and thus any increase in rates must by default involve the repricing of financial assets value. But a gentle increase in interest rates is also a signal that the economy is strengthening which should be positive for equity investors.

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Headline Numbers

Measure	Value as of June 19th, 2015	Value as of July 15th, 2015
UK Government 10 year bond rate	1.99%	2.13%
GDP Growth rate YoY	2.40%	2.90%
CPI Core rate	0.90%	0.80%
RPI Inflation rate	1.0%	1.0%
Interest rate	0.50%	0.50%
Interbank rate 3 month	0.54%	0.55%
Government debt to GDP ratio	89.4%	89.4%
Manufacturing PMI	52	51.4
Sovereign Western Europe CDS	45.52	46.32
Euro Bank CDS	78.2	69.52
FTSE CDS	78	78.14

Headline Thought

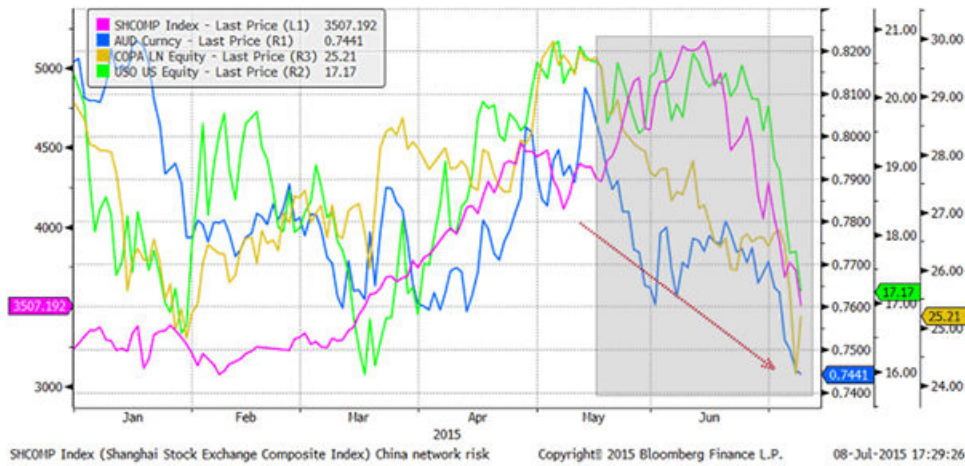
Economic and industrial policy was very much the dog that didn't bark or even bite during the recent general election campaign but since May, the Chancellor has rather skilfully managed to steer the debate back to the future of the UK and our productivity puzzle. Investors have long been warning that the UK is facing some very serious macro-economic challenges, not least low levels of industrial and capital investment, low levels of labour productivity and a yawning balance of payments (and trade) deficit. Inevitably these issues have now come centre stage, helped along by the strengthening pound. But as this debate now intensifies, it's easy to lose sight of the fact that the UK is still an enormously attractive place to do business. The latest evidence for this comes in the results from this year's IESE VC/PE Country Attractiveness Index published last month. This report is in its sixth year and looks at 120 countries analysing the six key drivers important to private equity/ venture capital investors, namely economic activity, investor protections and corporate governance, depth of capital markets, taxation, human and social environment and entrepreneurial opportunities. The good news is that the UK is "back to pre-crisis levels climbing two positions to number two worldwide thanks to a strong increase in expected GDP and improved entrepreneurial opportunities stemming from growing innovation capacity."

Top 10 Rankings

United States	100.0
United Kingdom	94.0
Canada	93.9
Singapore	92.3
Japan	91.3
Hong Kong	90.1
Germany	89.5
Australia	88.5
New Zealand	86.0
Switzerland	85.7

Additionally, you may just have noticed that there is a stock market crisis brewing in China! Local equities have, to put it mildly, gone into reverse after a staggering bull market run which at its peak saw the local growth market - the Chinext - valued at a rather fruity 147 times earnings. Over the last few weeks virtually every major news outlet has been full of stories about private Chinese investors in varying stages of open panic. Margin trading - one of the prime drivers of trading - has collapsed, and the Chinese government, sensing public panic, has rushed to the policy barricades. The IPO pipeline has shut down, banks are withdrawing loans, and trading on some days has actually seized up. The Economist magazine reports by the end of July 7th trading in over 90% of the 2,774 shares listed on Chinese exchanges had been suspended or halted. The magazine also noted that on some days, only 11% of stocks were actually trading, although that number had improved to 40% within a few days. The big numbers in terms of impact are also fairly stark. Apparently some \$3.5 trillion in wealth has been destroyed, although it is worth observing that stock market wealth is not a major player within the Chinese economy - local markets represent a third of GDP, compared to 100% in developed economies.

But perhaps the biggest impact is not on local investors, but on global commodity markets. The chart below - from risk consultants Check Risk - looks at returns from the beginning of 2015 from the Shanghai Composite stock market index (the pink line), the Australian dollar (the blue line), Copper prices via a London ETF (the yellow line), as well as the share price of one of the world's largest oil price exchange traded fund trackers, with the ticker USO. Notice the direct relationship between the falling value of Chinese equities and resource prices/Aussie dollar. Most experts think that the Chinese markets are likely to fall by at least another 20% to 30% before they hit fair value, implying that the resource sector could be due another big sell off.



Source: CheckRisk, Bloomberg

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CDS Rates

Picking up on a theme from previous months, it's clear that CDS options are drifting higher in price with nearly all the major European investment banks registering increased prices for options-based insurance sold to protect against default from their bonds. Nervousness about events in Greece and its likely impact on the banking system is one likely driver, although investors are also slowly beginning to price back into the market the possibility that interest rates are likely to head higher later this year, possibly increasing the scope for more defaults later in 2016. As for individual banks, the stand out story still seems to be the markets perception of Lloyds' continuing strength in terms of CDS options pricing. Bar Rabobank and Nomura, the British bank is now viewed as one of the safest banks in Europe in terms of potential for bond defaults.

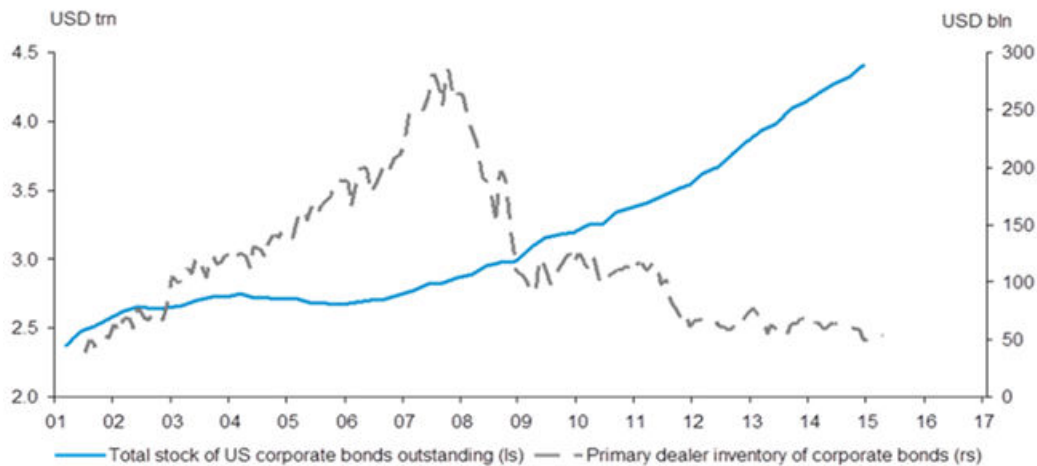
Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	55	100	-3	15	A -
Barclays	42	81	-3	2	A
Citigroup	30	82	3	16	A
Commerzbank	58	92	-7	0	A+
Credit Suisse	41	74	-7	14	A
Deutsche Bank	48	89	-2	13	A+
Goldman Sachs	36	89	0	17	A
HSBC	35	68	-1	18	AA-
JP Morgan	29	69	3	15	A+
Lloyds Banking Group	27	62	-5	1	A
Morgan Stanley	33	82	4	16	A
Nomura	21	61	0	-15	A-
Rabobank	22	62	-4	11	AA-
RBS	53	83	3	-3	A
Soc Gen	40	81	-9	2	A
UBS	27	60	-6	12	A

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Government Bonds

Investors have long favoured bonds, in part because they obviously provide a fairly reliable source of income. But bonds are also attractive for many investors because they are liquid i.e. there's lots of them about and they are easy and cost effective to trade in. That ease of trading has made the global bonds market a financial leviathan, with trading in fixed income securities many orders of magnitude bigger than in equities. In the U.S for instance, the stock of corporate credit has grown from \$2.75 trillion in 2008 to \$4.4 trillion today. Market growth has far outpaced the growth in traded volumes as shown by the chart below.

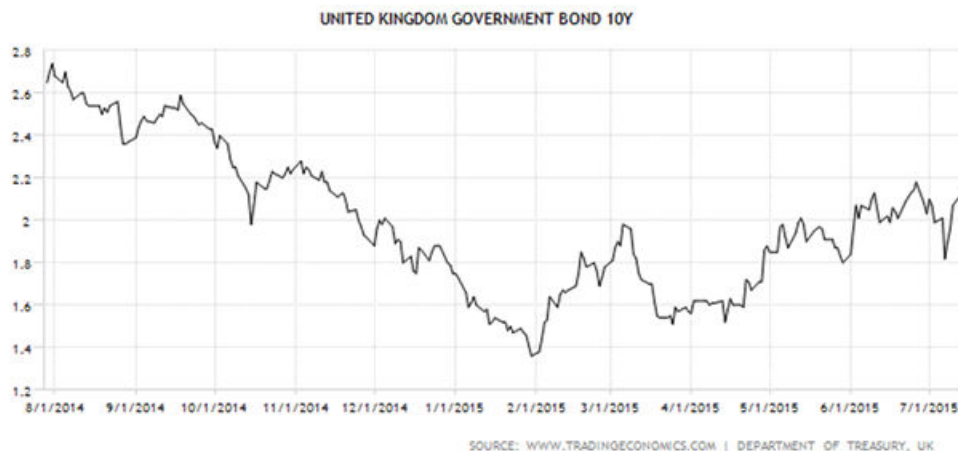
But many investors are now becoming concerned that this ample and deep liquidity is now under threat. Some of the most active traders in bonds have been big investment banks, now subject to increasingly intrusive regulations about the assets they can hold on their balance sheet. Dealers are now disincentivised from holding sufficient bond inventory to act as a market shock absorber. The chart below shows that inventories of corporate bonds held by US dealers - the biggest and deepest bond market on the planet - is now at record lows since statistics began to be collected at the start of the new millennium.



Source: <http://www.valuewalk.com/2015/07/in-search-of-bond-market-liquidity/99999/>

This fuels widespread concern amongst institutional investors that bonds are now so liquid that they've become a core component for more momentum driven, tactically motivated, multi asset portfolio investors as well as big hedge funds. These investors might react badly to an increase in interest rates for instance, selling corporate bonds at exactly the same time as investors are also selling equities and commodities. In this worst case scenario liquidity could seize up very quickly in a stressed market, forcing all financial assets to essentially behave as one super correlated risk set.

UK Government Bonds 10-year Rates 2.13%



Source: <http://www.tradingeconomics.com/united-kingdom/government-bond-yield>

CDS Rates for Sovereign Debt

Country	Five Year
France	35
Germany	15
Japan	41
United Kingdom	20
Ireland	53
Italy	115
Portugal	183
Spain	95

Eurozone peripheral bond yields

Country	July 15th, 2015	June 19th, 2015	Spread over 10 year German bonds
Spain 10 year	2.02%	225	123
Italy 10 year	2.01%	234	122
Greece 10 year	12.50%	11181	1171

	S&P Rating		Moody's Rating		Fitch Rating
Germany	AAA	Stable	AAA	Negative	AAA
United Kingdom	AAA	Negative	AA1	Stable	AA+
United States	AA+	Stable	AAA	Stable	AAA

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Equity Markets and Dividend Futures

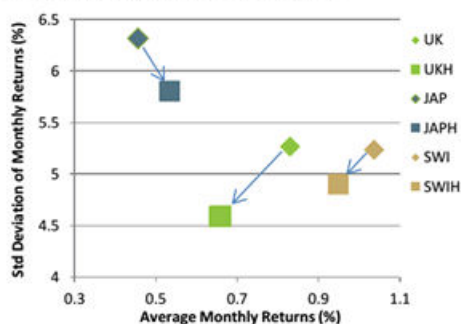
One of the side effects of the debate about whether to tighten monetary policy and raise interest rates or to keep monetary policy deliberately loose (and rates zero bound) is the effect on currency markets. The prospect of increasing interest rates is usually a big positive for FX investors, implying a strengthening economy and better risk free returns for the higher rates currency. By contrast those countries engaged in more activist monetary policy - which tends to involve lower rates and bigger central bank balance sheets - usually experience a weakening in their currency's value. This is likely to help exporters sell goods into foreign markets although this could also result in an all-round currency war as different countries look to maximise their FX advantage.

This complicated macro-economic backdrop makes the decision about whether to hedge currency risk for equity investors a difficult one. Hedging out equity exposure can be costly but the returns can be very clear - many investors in Japan in recent years have missed out on local currency returns as the yen has moved down sharply in value. Recent research from ETF specialists at Source suggests that the decision about whether to hedge (or not) very much depends on not only your time scale but also the specific national currency. Source's Paul Jackson looked at three very different but systemically important markets over the period starting July 1986 and then looked at returns based on dividing the hedged index (hedged into US dollars) by the unhedged index. According to Jackson, "it would appear that since mid-1986 a policy of hedging yen exposure has been vindicated. However, the returns to hedging are cyclical and the entirety of the benefit since 1986 has been earned since 2012. The apparent mean reversion implies the recent strong performance of yen-hedging may not be repeated. We have recently argued against hedging yen exposure. Even more striking is the fact that investors in Swiss and UK equities would have fared better without currency hedging (because the CHF has appreciated and because UK interest rates systematically exceeded those of the US, making hedging expensive)." The Bottom line? It depends!

Figure 1 – Hedged/unhedged equity indices (USD, July 1986 = 100)



Figure 2 – The impact of hedging on equity market returns in USD (July 1986 – June 2015)



Source: MSCI, Datastream, Global Financial Data and Source Research. Note: Calculations are based on MSCI total return indices in local currency. The unhedged indices are calculated by converting local returns into USD returns. Hedged indices adjust local currency returns for the cost of hedging. All data is monthly and the cost of hedging is calculated using one month LIBOR rates. Past results are no guarantee of future performance.

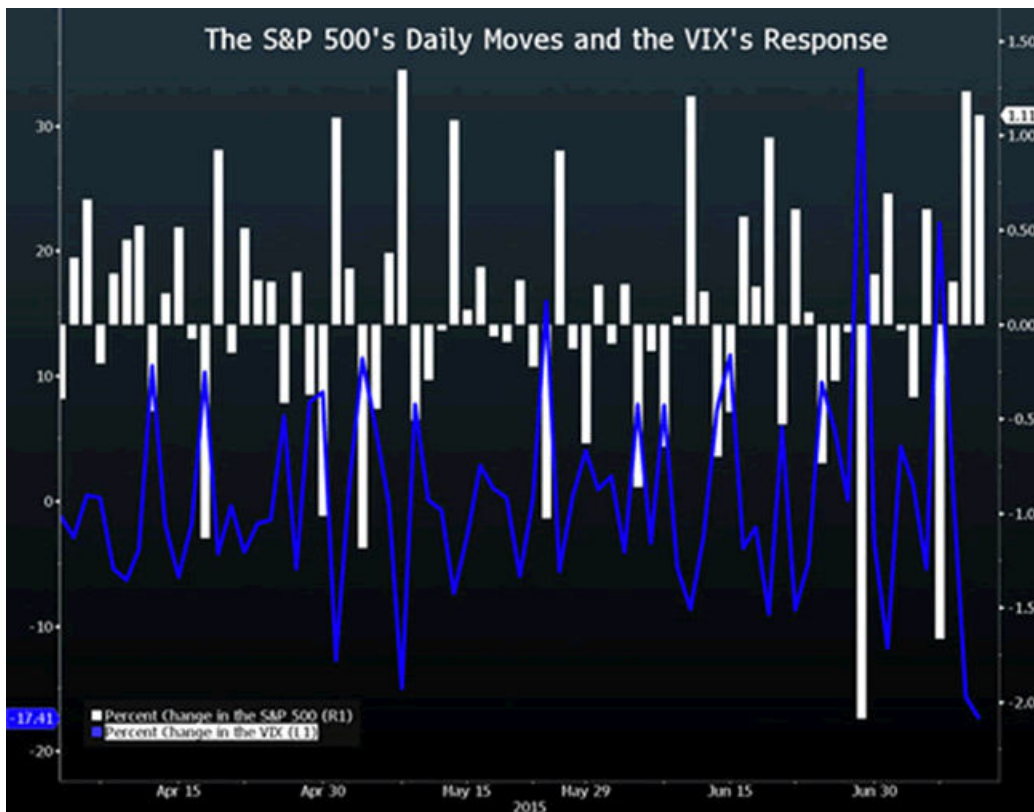
Index	July	June	Reference Index Value	Level 6 Months Ago
Eurostoxx 50	114.4	114.7	3626	111
FTSE 100 (Dec 14)	247	246	6752	N/a

Name	Price % change						Close
	1 month	3 months	6 months	1 year	5 year	6 year	
FTSE 100	0.632	-4.85	3.91	0.633	29.6	55.4	6754
S&P 500	1.27	0.203	5.93	6.99	92.7	127	2110
Benchmark for gilt							
iShares FTSE UK All Stocks Gilt	-1	-5.61	-5.71	5.04	13.5	16.6	11.985
Benchmark for volatility							
VIX New Methodology	-9.72	6.11	-36.2	21.5	-49.1	-47.4	13.37

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Volatility

By and large, markets have taken the recent crisis over Greece and the Chinese stock market meltdown in their stride. Short to medium term measures of market volatility such as the all-important VIX index (based on the S&P 500 index) remain at relatively low levels - this index has a long term average of above 20, but in recent years this has trended to below 15. Yet this lack of market turbulence does hide some more specific short term volatility blow outs, with big jumps in the VIX being recorded on Chicago Board Options Exchange Volatility Index over the last few weeks - evidenced by the chart below which shows how the VIX index moves in the opposite direction to the S&P 500 80% of the time.



For example Bloomberg reports that since "April, the VIX has jumped an average of 17 percent on days when the S&P 500 fell 1 percent or more, compared with 12 percent on average for similar daily moves since the start of the bull market, according to Bloomberg data. On June 29, the day Greece shut banks and imposed capital controls, the VIX increased 34 percent, the most since April 2013, as the S&P 500 slid 2.1 percent. The volatility gauge jumped again on July 8, rising 22 percent, its second-biggest gain this year, as the S&P 500 lost 1.7 percent, a drop it has matched only three times this year. That day, Chinese stocks' rout ignited a wave of risk aversion as sellers were blocked from the market."

Paradoxically though outside of these hectic days, measures of market volatility tend to drop back sharply, with the VIX trading below its 12 month average for nearly all of 2015. Yet it's also worth noting that measures of implied volatilities on longer-dated Treasuries and currencies remain above theirs according to Bloomberg. The US news outlet also observes that shares outstanding in the iPath S&P 500 VIX Short-Term Futures ETN, the most popular exchange-traded note comprised of VIX futures, reached a record at the end of May.

Measure	July Level	June Level	May Level	April Level	Acc/Dec	Direction Upwards
Vstox Volatility	18.8	24.15	21.92	20.47	DEC	No
VFtse Volatility	11.97	14.09	16.55	14.94	ACC	Yes
FTSE Put Call Ratio	1.02	0.75	1.02	1.9	DEC	No

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Summary of Pricing Impact on Structured Products

Pricing Parameter	Change	Impact on Structured Product Price
Interest Rates	Up	Down
Underlying Level	Up	Up (unless product offers inverse exposure to the underlying)
Underlying Volatility	Up	Down for capped return/fixed return/capital at risk products. Up for uncapped return/capital protected products.
Investment Term	Up	Down
Issuer Funding Spread	Up	Down
Dividend Yield of Underlying	Up	Down

Correlation (if multiple underlyings)

Up

Up (unless product offers exposure to the best performing underlyings only)

Source: UK Structured Products Association, January 2014

This information is provided for information purposes only, and the impact on a structured product price assumes all other pricing parameters remain constant.

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Explanation of Terms

CDS Spreads and Credit Ratings

A CDS effectively acts like an option insuring at a cost in basis points a bank or government bond in case of default. The higher the basis points, the riskier the market perceives that security. Crucially CDS options are dynamic and change in price all the time. A credit rating is issued by a credit rating firm and tells us how risky the issuer is viewed based on the concept that AAA (triple A) is the least risky and ratings at C and below are regarded as much riskier. CDS and ratings are useful for structured product buyers because they give us an indication of how financial risk is viewed by the market. Crucially a high CDS rate indicates that an issuer of a bond will probably have to pay a higher yield or coupon, which could be good for structured product buyers as bonds are usually a prime source of funding for a structured product. G8 government bonds issued by the likes of the UK and US Treasury are also sometimes used as collateral in some form of investments largely because they are viewed as being low risk. One last small note on credit ratings and CDS rates. A is clearly a good rating for a bond (and much better than B) but AA will be viewed as even "safer" with triple AAA the least risky. Terms of CDS rates anything much above 100 basis points (1%) would warrant some attention (implying the market has some, small, concern about the possibility of default) while anything above 250 would indicate that the market has major concerns on that day about default.

Why does the yield matter on a bond?

As we have already explained bonds are usually used as part of a structured product. The bonds yield or coupon helps fund the payout. All things being equal a higher bond yield means more funding for the payout. But rising bond yields, especially for benchmark US and UK Treasury 10 year bonds also indicate that the markets expect interest rates to rise in the future. Rising interest rates are not usually a good sign for risky financial assets such as equities.

Volatility measures

Share prices move up and down, as do the indices (the S&P 500 and FTSE100) that track them. This movement up and down in price is both regular and measurable and is called volatility. It is measured by stand alone indices such as the Vix (tracking the volatility of the S&P 500), VStoxx (the Eurozone Dow Jones Eurostoxx 50 index) and VFTse (our own FTSE index). These indices in turn allow the wider market to price options such as puts and calls that pay out as markets become more volatile. In simple terms more volatility implies higher premiums for issuers of options. That can be useful to structured product issuers as these options are usually built into an investment, especially around the barrier level which is usually only ever broken after a spike in volatility. Again all things being equal an increase in volatility (implying something like the Vix moving above 20 in index terms) usually implies higher funding levels for issuers of structured products.

Dividend Futures

These options based contracts measure the likely total dividend payout from a major index such as the FTSE 100 or the Eurozone DJ Eurostoxx 50 index. In simple terms the contract looks at a specific year (say 2015) then examines the total dividend payout from all the companies in the index, adds up the likely payout, and then fixes it as a futures price usually in basis points. Structured product issuers make extensive use of dividend futures largely because they've based payouts on a benchmark index. That means the bank that is hedging the payout will want to be 'long' the index (in order to balance it's own book of risks) but will not want the dividends that come from investing in that benchmark index. They'll look to sell those future possible dividends via these options and then use the premium income generated to help fund their hedging position. In general terms the longer dated a dividend future (say more than a few years out) the lower the likely payout on the dividend future as the market cannot know dividends will keep on increasing in an uncertain future and must fix its price in some level of uncertainty.

Equity benchmarks

Most structured products use a mainstream well known index such as the FTSE 100 or S&P 500 as a reference for the payout. For investors the key returns periods are 1 year (for most auto calls) and 5 and six years for most 'growth' products. During most though not all five and six year periods it is reasonable to expect an index to increase in value although there have been many periods where this hasn't been the case especially as we lurch into a recession. Risk measures such as the sharpe ratio effectively measure how much risk was taken for a return over a certain period (in our case the last five years using annualised returns). The higher the number the better the risk adjusted return with any value over 1 seen as very good.

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To find out more about UKSPA, please visit www.ukspassociation.co.uk.

Kind Regards,



Zak De Mariveles
UK Structured Products Association Chairman
chairman@ukspassociation.co.uk

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UK Structured Products Association, c/o 1 - 9 Hardwick's Square, London, SW18 4AW