



*With commentary from David Stevenson*

Now that the US Federal Reserve has, finally, made its move, the capital markets are now turning their attention to the Eurozone and the continuing adventures of Super Mario Draghi, the head of ECB. Many investors' seemed to be shocked by his decision to in effect 'tinker' with quantitative easing, but it seems like he's probably done enough to keep the Euro rolling lower. Most hedge funds and institutional investors do not believe that we are even remotely approaching the end of QE in Eurozone, with the vast majority betting on even lower levels for the Euro dollar rate.

The good news though is that there's evidence of a pronounced recovery in Europe, with increasing PMI numbers and an improving economic backdrop. Draghi knows that price of oil is likely to rebound soon enough and so being too aggressive on rates would have risked over-egging the omelette. The reality on the ground is that Draghi does not need a lot of inflation to reverse inflation statistics. The year on year comparisons are so easy to beat it would only take a small increase in oil prices or wages to ensure that inflation rises. The current market reaction was probably an overreaction that will settle down and the original upward trend re-establish. The market had talked itself into a boost for asset prices, which they didn't get but that doesn't mean that we've seen the last of Mr Draghi's policy moves.

On another completely unrelated subject, at what point will the structured products world react to a profound shift in the ETF markets? The smart beta revolution can easily be derided as marketing hype but there's growing survey evidence which suggests that professional investors and advisers are actually, at long last, slowly shifting their money into funds which track more 'intelligent indices'. The latest survey was from ETF issuer Invesco Powershares (the research was run by CoreData). It showed that "smart beta strategies are gaining traction across Europe, with 69% of existing users saying they expect to increase their allocation in the next three years..." The report highlights that wealth respondents and financial advisers are increasingly turning to smart beta as an integral part of investor portfolios, with smart beta currently making up 9% of a user's total portfolio. Of those that use smart beta, 91% of users say that it had met their expectations, and 78% recommend it for clients, colleagues and investment professionals.

These are impressive numbers and makes one wonder whether there's a big opportunity for structured products issuers to embrace this shift in attitudes and hard wire these "intelligent" indices into their new plans?

## Contents

- [Headline numbers](#)
- [CDS Rates](#)
- [Government Bonds](#)
- [Equity Markets and Dividend Futures](#)
- [Volatility](#)
- [Summary of Pricing Impact on Structured Products](#)
- [Explanation of Terms](#)

---

## Headline Numbers

Measure	Value as of November 13th, 2015	Value as of December 10th, 2015
UK Government 10 year bond rate	1.97%	1.84%
GDP Growth rate YoY	2.30%	2.30%
CPI Core rate	1%	1.10%

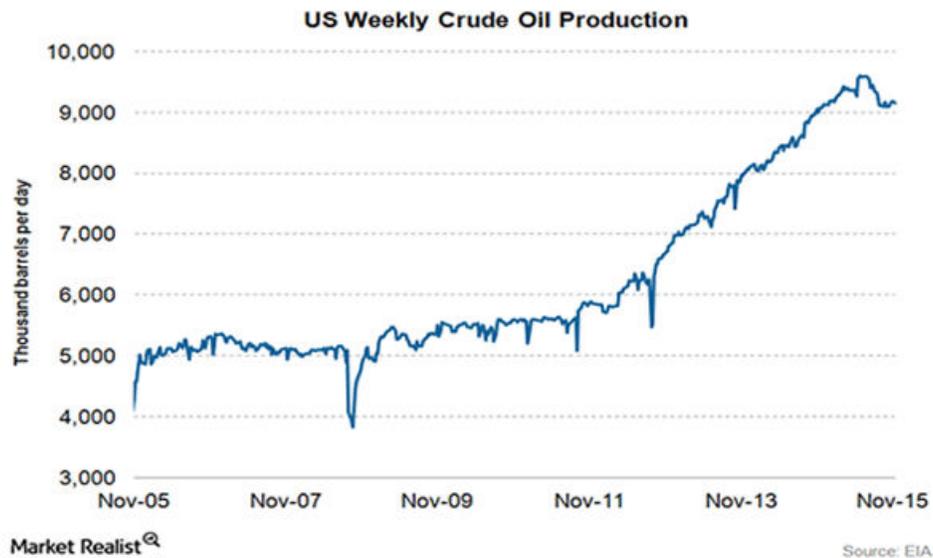
RPI Inflation rate	0.8%	0.7%
Interest rate	0.50%	0.50%
Interbank rate 3 month	0.57%	0.57%
Government debt to GDP ratio	89.4%	89.4%
Manufacturing PMI	55.5	52.7

Yet again the UK stock market, if not the UK economy, is being dragged lower by the continuing 'energy crisis'. The UK large cap market has a large number of big energy firms dominating the FTSE 100 index and an even longer tail of mining companies - and the bad news here is that iron ore and copper prices seem to be constantly falling along with crude.

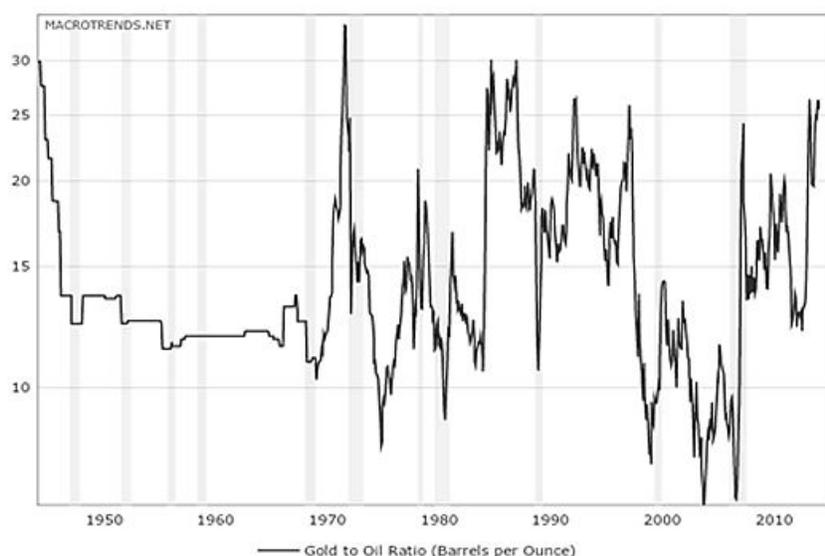
The good news for investors in the UK index is that there is some evidence that since the summer, the declines in U.S. oil output appear to have slowed - a signal many energy investors have been hoping for in order to avert even bigger price declines. The latest Energy Information Administration data released last week showed that production fell 20,000 barrels a day, or 0.2%, in September from August to 9.3 million barrels a day. Some shale-producing regions are showing production declines, like North Dakota but the Wall Street Journal reports that "Texas' output was flat in September, as producers have become unexpectedly efficient at extracting oil in the Permian Basin in West Texas. And offshore production increased in September, offsetting some of the drop in shale output."

The bad news is that oil prices could go much lower because of huge over capacity. A recent survey of analysts and investors for US news platform CNBC found that only 21 per cent believed that the oil price bottomed out this year. The largest share, 46 per cent, believe that the market will only bottom out in the first half of 2016, when Iranian production will return to the market after international economic sanctions are lifted. Analysts at US bank Goldman Sachs sum up the bearish case brilliantly when they observe that "while nascent, the supply adjustments to date are still insufficient, and demand has either done too little to offset this slow supply adjustment or seen outright declines. This sustains the need for lower prices for even longer, keeping us underweight commodities for the next 12 months..."

The chart below tells its own dismal story for energy investors. It highlights US weekly crude oil production in the US. Notice the astonishing ramp up in supply and the trifling recent decline in output. If anyone thinks that US oil production is showing signs of imminent collapse they should think again after having looked at this chart. The cutback in capacity has only just begun. For energy investors a hard 2016 looms into view.



Sticking with the commodity theme, many investors have long been fascinated by the relationship between oil and gold prices, with both seen as potential inflation hedges. The oil gas index - captured in the chart below from website Macrotrends - is currently signalling a high in the number of oil barrels each ounce of gold will buy. Looking at the chart we can see that the average since 1946 has been that one ounce of gold buying you 14.83 barrels of oil. In simple terms whenever one ounce of gold buys more than 14.83 barrels of oil either oil was cheap or gold was expensive. And conversely, whenever an ounce of gold would buy less than 14.83 barrels, then oil was expensive or gold was cheap. With current levels over 25, either oil is very cheap or gold incredibly expensive! My own hunch is that oil prices will fall much lower, which means that oil will be historically very cheap. This might also encourage investors to believe that gold is very expensive by comparison - with a decisive push past \$1000 an ounce!



Source: Gold to Oil Ratio Historical Chart - [www.macrotrends.net/1380/gold-to-oil-ratio-historical-chart](http://www.macrotrends.net/1380/gold-to-oil-ratio-historical-chart)

[Back to menu](#)

## Bank CDS options

It's been a quiet month in the world of bank CDS options, with a small decline in prices overall. But one story does continue to stand out - and it's an echo from our notes last month. Pricing on RBS options continue to fall dramatically with one-year rates down at 17 basis points (below even Nomura and Lloyds). At the five-year level RBS CDS rates now trade below those of HSBC, once seen as the great rock solid exemplar of stability.

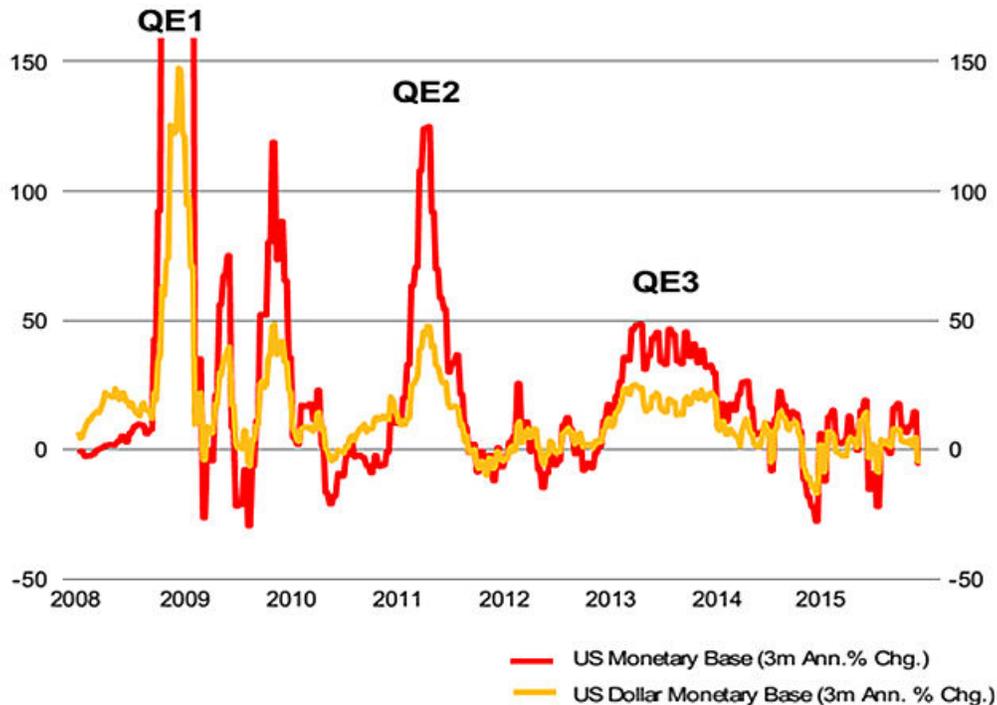
Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	53	117	-7	41	A -
Barclays	19	58	-1	8	A
Citigroup	29	84	1	11	A
Commerzbank	38	86	-1	9	A+
Credit Suisse	41	83	5	32	A
Deutsche Bank	44	93	4	21	A+
Goldman Sachs	35	87	3	2	A
HSBC	26	66	-1	24	AA-
JP Morgan	37	76	2	14	A+
Lloyds Banking Group	27	47	-2	-1	A
Morgan Stanley	32	86	3	5	A
Nomura	21	68	3	5	A-
Rabobank	22	49	-6	6	AA-
RBS	17	56	-12	7	A
Soc Gen	40	70	-3	-13	A
UBS	27	46	-5	3	A

Source: [Meteoram.com](http://Meteoram.com), 10th December, 2015

[Back to menu](#)

## Government Bonds

The chart below tells a truly amazing story. It comes from London based research firm Cross Border Capital (CBC) and shows the US monetary base since 2008, highlighting various incarnations of QE. Note the constantly declining amplitude of monetary expansion as the US Federal Reserve slowly but surely tightens the monetary screws.

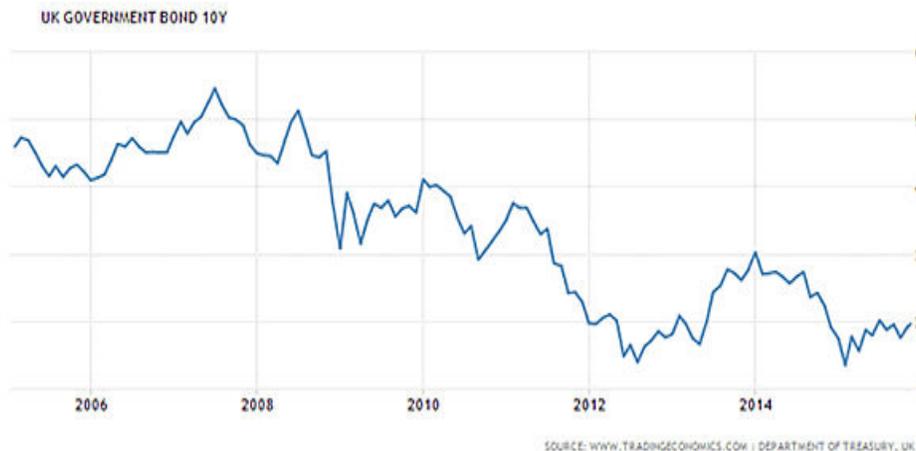


**Source: Cross Border Capital (CBC)**

According to Cross Border the very latest numbers for the US domestic monetary base data shows a noticeable contraction of 5.8% on a 3-month basis. On an annualised basis the US dollar monetary base has shrunk by 4.6% (3m ann. rate). This matters because the US dollar monetary base is sometimes taken as a 'crude' proxy for Global Liquidity. Looking at the numbers in more detail the researchers at CBC also observe that foreign holdings of Treasuries at Federal Reserve is also clearly shrinking (-3.0%). Are the Chinese the big sellers?

These numbers matter, especially to bond investors globally. Firstly, they indicate that the US Fed really is scaling back its buying activity - as are foreign banks for US debt - which removes one important underpinning for sovereign bond prices. But these numbers could also indicate that the US economy is slowing down as monetary growth fades away. If this latter trend is more relevant bond investors might be cheered as it indicates an increased likelihood of a US recession and thus even higher bond prices.

**UK Government Bonds 10-year Rates 1.97%**



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

### CDS Rates for Sovereign Debt

Country	Five Year
France	26
Germany	13
Japan	48
United Kingdom	18
Ireland	44
Italy	91
Portugal	171
Spain	79

### Eurozone peripheral bond yields

Country	November 13th, 2015	December 10th, 2015	Spread over 10 year
Spain 10 year	1.78%	1.61%	101
Italy 10 year	1.56%	1.52%	0.93
Greece 10 year	7.19%	8.35%	776

	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

[Back to menu](#)

## Equity Markets and Dividend Futures

As we move towards the end of 2015 it's worth looking back at the hard numbers on returns from varying stock markets. S&P Dow Jones recently released their numbers for the year to December 1st, with some fascinating highlights. Overall their catchall index, the S&P Global 1200 Index gained just 0.46%, adding a relatively meagre \$15 billion of market capitalization in global blue-chip equities. Excluding the contribution from the U.S., this would have been a loss (the S&P 500 added a cumulative 1.6% to the total and around \$51 billion in market cap). Interestingly despite outperforming, the U.S. market was not the greatest contributor in relation to the size of its market. According to S&P Dow Jones "adding to returns far above and beyond their global weighting, equities in Denmark and Ireland excelled this year. In the broader equity landscape, a rip-roaring Jamaica took the top spot. The worst performer - Greece - should be no surprise."

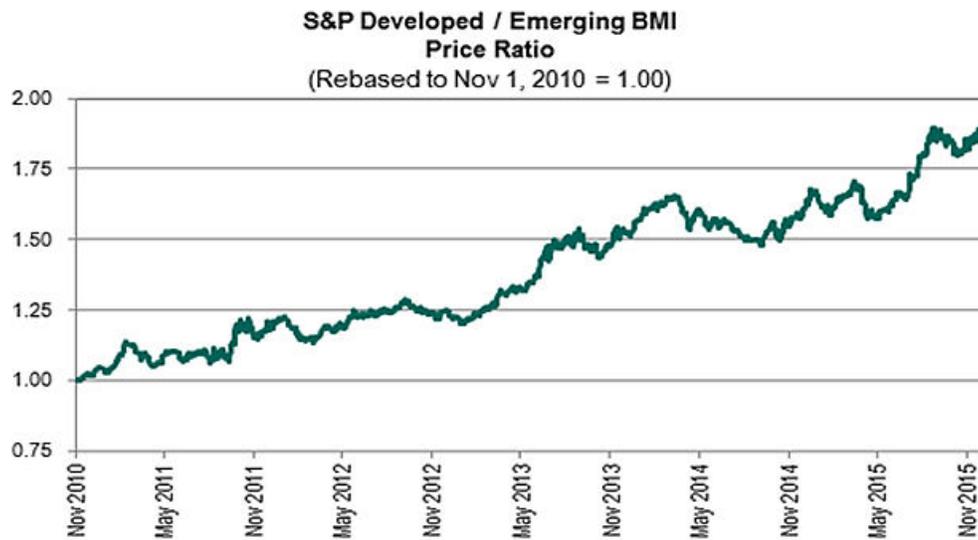
Top 3 Single-Country Performances (USD TR)

S&P Jamaica BMI	76.6%
S&P Hungary BMI	29.5%
S&P Latvia BMI	29.2%

Worst 3

S&P Ghana BMI	-27.3%
S&P Egypt BMI	-28.4%
S&P Turkey BMI	-28.5%

The much bigger global story has been a predictable one - developed world stocks have continued to outperform their emerging markets siblings. The chart below shows the relationship (in returns) between developed world equities in the broad S&P universe and emerging markets. Notice how developed world stocks have continuously pushed ahead in the last four years - in relative terms - powered in part by the fear that QE tapering will impact EM market liquidity. According to S&P those looking for bargains might now "be tempted by an emerging market landscape that - on a relative basis - has only seen half the price appreciation of developed equivalents."



Source: S&P Dow Jones

Index	December	November	Reference Index Value	Level 6 Months Ago
Eurostoxx 50	115.1	115.2	3266	113.25
FTSE 100 (Dec 14)	248	248.5	6095	N/a

Name	Price % change						Close
	1 month	3 months	6 months	1 year	5 year	6 year	
FTSE 100	-2.68	-1.64	-9.29	-6.17	5.49	17.73	6126.68
S&P 500	-1.49	5.44	-1.56	-0.59	66.07	86	2047.62
Benchmark for gilt							
iShares FTSE UK All Stocks	0.77	-0.78	2.37	0.68	17.85	18.13	12.31
Benchmark for volatility							
VIX New Methodology	18.7	-25	35	31.7	13.68	13.4	19.61

[Back to menu](#)

## Volatility

The most compelling story about volatility in 2015 hasn't been the recent increase in market turbulence - scary though that has been - but the near panic in the hedge fund community about how to make money (in turbulent markets!). The brutal truth is that for every private day trader who dabbles in options based volatility products, there are probably hundreds of hedge funds who make much of their fortune out of volatility trends. The bad news is that these professional traders are in deep trouble as the whole hedge fund asset management falls apart.

According to numbers from Numis, 2015 has been another stinker with most strategies down in the nine months to 30 September, a period during which the MSCI World Index declined 5.6% in US\$ terms. Numis also reports that equity related strategies, in particular, have had a difficult time with the HFRI Event Driven and HFRI Equity Hedge down 3.2% and 2.2% respectively. The table below looks at one, important, part of the diverse hedge fund universe - the trend followers otherwise known as CTA funds. These traders constantly watch out for actionable trends using complex analysis and a deep understanding of everything from FX through to commodities. The table reminds us that these signals based investors have had a terrible year. It uses numbers from the US based Barclays CTA Index and shows that overall, of the three quarters of all CTA funds which reported returns, year to date returns have been negative, although November did throw up some small but valuable gains.

Barclay CTA Indices	November ROR †	Percentage of funds reporting †	YTD through November†
<u>Barclay CTA Index</u>	1.38%	74.30%	-0.32%
<b>SUBINDICES</b>			
<u>Agricultural Traders Index</u>	-0.46%	93.75%	0.99%
<u>Currency Traders Index</u>	0.73%	60.66%	4.03%
<u>Discretionary Traders Index</u>	0.48%	68.42%	0.11%
<u>Diversified Traders Index</u>	1.87%	72.53%	-2.77%
<u>Fin./Met. Traders Index</u>	0.69%	77.61%	2.32%
<u>Systematic Traders Index</u>	1.44%	73.50%	-1.51%

† Estimated performance for November 2015, percentage of reporting funds, and YTD calculated with reported data as of December-10-2015 08:25 US CST

Source: [www.barclayhedge.com](http://www.barclayhedge.com)

That damage can also be seen in numbers from the big high profile stockmarket listed funds with Pershing Square and Third Point down 9.3% and 5.3%, respectively (based on their latest NAVs). Not unsurprisingly pressure is intensifying on fees, with the old 2 and 20 structure a very distant memory for most managers. According to EurekaHedge, the level of performance fees charged by the new hedge funds has fallen from 17.1% in 2014 to 14.7% in H1 2015, with the Long/Short Equity funds facing the greatest fee pressure.

There's plenty of theories for what's gone wrong with these performance numbers. It seems that the hedge fund masters of the universe are as bad as the rest of us at predicting what central bankers might do next in our Gerrymandered markets. They've also struggled from the increasing correlation of assets and trend followers seem to be complaining about the there being too much of the wrong kind of volatility about. Maybe, god forbid, all those puzzling market anomalies waiting to be exploited have disappeared from view under the gaze of thousands of active hedge fund observers?

Measure	December Level	November Level	October Level	September Level
Vstox Volatility	24.73	25.1	24.1	27.76
VFtse Volatility	16.93	19.56	16.6	21.07
FTSE Put Call Ratio	1.01	0.99	1.01	1.01

[Back to menu](#)

## 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.

[Back to menu](#)

## 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 his 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.

[Back to menu](#)

---

To find out more about UKSPA, please visit [www.ukspassociation.co.uk](http://www.ukspassociation.co.uk).

Kind Regards,



Zak De Mariveles  
UK Structured Products Association Chairman  
[chairman@ukspassociation.co.uk](mailto:chairman@ukspassociation.co.uk)

THIS COMMUNICATION IS FOR FINANCIAL ADVISERS IN THE UK ONLY

This email is sent from The UK Structured Products Association (UKSPA) and is intended for UK financial advisers only. UKSPA has taken every step to ensure the accuracy of the information in this email but cannot accept liability for errors. Copyright of the contents of this email belongs to UKSPA. This email and its contents are only intended for the recipient. If you no longer wish to receive emails from UKSPA please [click here to unsubscribe](#)