

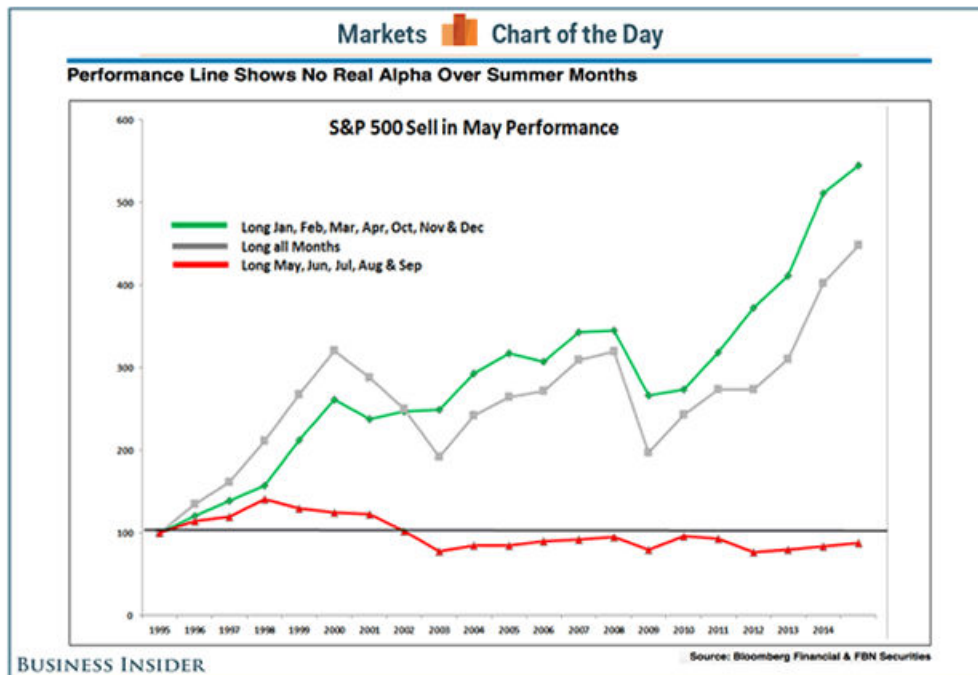


With commentary from David Stevenson

Quantitative easing and monetary experimentation by central bankers has had a peculiar effect on markets. It's almost acted a bit like a narcotic, lulling investors into a set of behaviours that has become increasingly abusive over the last eight years. As soon as markets sense a withdrawal of stimulus, there's the inevitable tantrum followed by professional intervention. But going cold turkey is barely ever mentioned i.e. pulling away all intervention to enable a full recovery. Instead central bankers begin to discuss ever more outlandish ideas including Milton Friedman's legendary helicopter money idea, which has come back into the debate after a recent speech by Ben Bernake explaining how it might work - and what its limitations might be. You can see the speech [here](#).

Obviously other forces are at work including the close relationship between oil prices and equities - see accompanying box below - but the overall soporific effect is something akin to an investment version of the ground hog day moment where we wake up and say "Hey haven't we been here before?" And so we find ourselves charging through the spring into the summer after a market rally, which has in turn followed a nasty winter where investors got the jitters about an impending recession. Sound familiar??

So let's be clear about what's changed. In summary, very little. The global economy is still growing but not at a very fast rate. The US Federal Reserve would like to raise interest rates, but not by very much. US equities still look expensive and Eurozone equities still look cheap. China is still trying to manage a massive restructuring without falling into a recession. Much more importantly all the worries that surround the global economy haven't gone away. Systemic risk is still high and there's alarming evidence that US corporate earnings growth has stalled. But the US economy still looks to be in reasonable shape, as does the UK, bar Brexit. In sum, nothing has really changed and yet nothing is very cheap. In this scenario surely we're about to see as repeat of previous market behaviour where investors start to fret over the summer? Sell in May and Go Away! The chart below is from the popular investment website Business Insider and shows the success of a strategy that avoids markets in the summer - and goes long just seven months a year.



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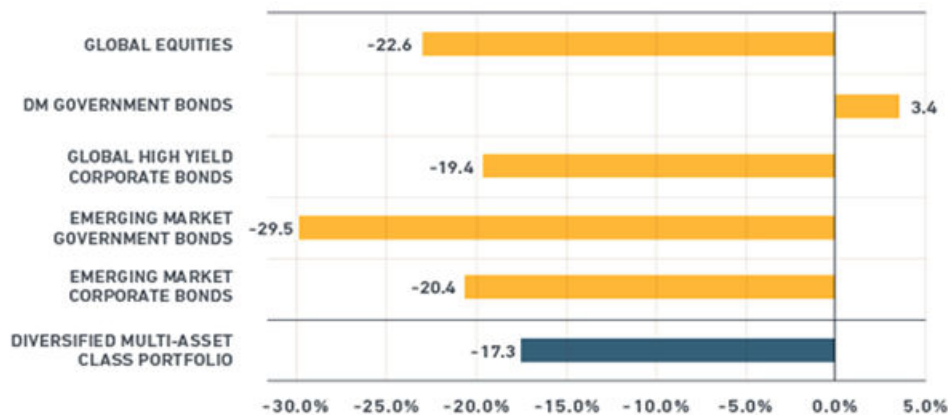
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Headline Numbers

Measure	Value as of March 11th, 2016	Value as of April 14th, 2016
UK Government 10 year bond rate	1.58%	1.46%
GDP Growth rate YoY	1.90%	2.10%
CPI Core rate	1.20%	1.50%
RPI Inflation rate	1.30%	1.60%
Interest rate	0.50%	0.50%
Interbank rate 3 month	0.59%	0.59%
Government debt to GDP ratio	88.60%	88.60%
Manufacturing PMI	52.7	51

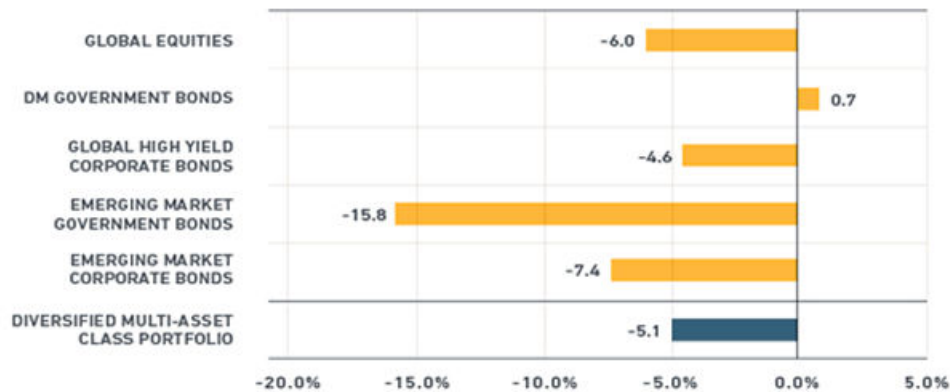
There does seem to be a growing body of evidence that suggests that we might have seen the worst in terms of oil prices. This doesn't preclude another big sell off in the more distant future and a push towards \$30 a barrel but we do seem to be settling into a trading pattern of between \$25 and \$45 a barrel. As an element of certainty seems to have returned to energy markets, forecasters have been scrubbing up their spreadsheets and running the numbers on what might happen to other financial markets. One of the most interesting stabs at crystal ball gazing comes from Raghu Suryanarayanan, Exec Director Risk and Regulation Research at index firm MSCI. His team has stress tested three possible scenarios for the price of oil. Note that each scenario below aims to assess the impact of various shocks and we've only included two in the charts below. We've taken the decision to exclude the scenario, which assumed oil at \$35 a barrel WITHOUT systemic risk. Our sense is that as the introduction explains, systemic risk is here to stay and not likely to vanish any time soon.

- A year of oil at \$10 a barrel: Global equities -22.6%, DM Government bonds 3.4%, Global High Yield -19.4%, EM Sovs - 29.5%, EM Corp Bonds -20.4%, Multi asset -17.3%



Source: MSCI

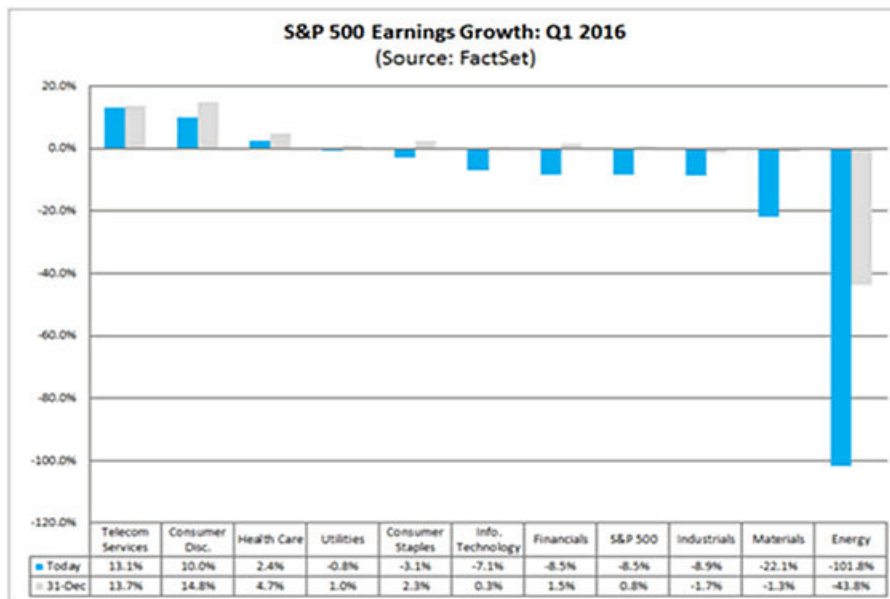
- A year of oil at \$35 a barrel, uptick in systemic risk: Global equities -6.0%, DM Government bonds 0.7%, Global High Yield -4.6%, EM Sovs - 15.8%, EM Corp Bonds - 7.4%, Multi asset -5.1%



Source: MSCI

- A year of oil at \$35 a barrel, without systemic risk: Global equities + 5.8%, DM Government bonds - 0.8%, Global High Yield 1.3%, EM Sovs 1%, EM Corp Bonds 0.9%, Multi asset 3.5%

Over in the US, the corporate earnings reporting season is already upon us even as Q1 2016 draws to a close. The bad news is that there has been a persistent trend in the downgrading of analyst estimates for companies in the S&P 500. According to analysts at consulting firm CheckRisk the bottom up profit estimate for US equities dropped by 9.6%, much worse than usual. They also cite numbers by Aidan Donnelly of Davy Stockbrokers, who observes that this is the largest percentage decline in the bottom-up EPS estimate during a quarter since Q1 2009. Donnelly also observes that the year over year earnings decline for Q1 2016 is estimated at -8.5%. Over the next few weeks although we have to be cautious as there is always a tendency by companies to push their guidance lower. Overall though the raw data suggests that US equities could be in for a bumpy ride in spring and early summer.



Source: FactSet

Source: CheckRisk

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Bank CDS options

After the turbulence of the last few months, the bank CDS market seems to have quietened down. Yet lurking beneath the calm there are some fascinating moves, not least the fact that the cost of insuring Santander bank bonds has fallen sharply (especially at the one year level) in the last few weeks. By contrast CDS rates for Deutsche Bank are still very high which indicates that investors are still worried by the financial risks at Germany's biggest bank. Credit Suisse is traditionally regarded as one of the safest

banks around but its CDS rates have started to creep up noticeably as have rates for HSBC, another traditional safe haven institution - although HSBCs price moves are probably part of a more general upwards rerating for UK banks, possibly in the light of the Brexit debate. In general terms the big US banks have fared the best over the last few months. Their CDS rates have moved up a little over the last year but in general the likes of Goldman Sachs and JPMorgan are viewed as less risky by CDS traders.

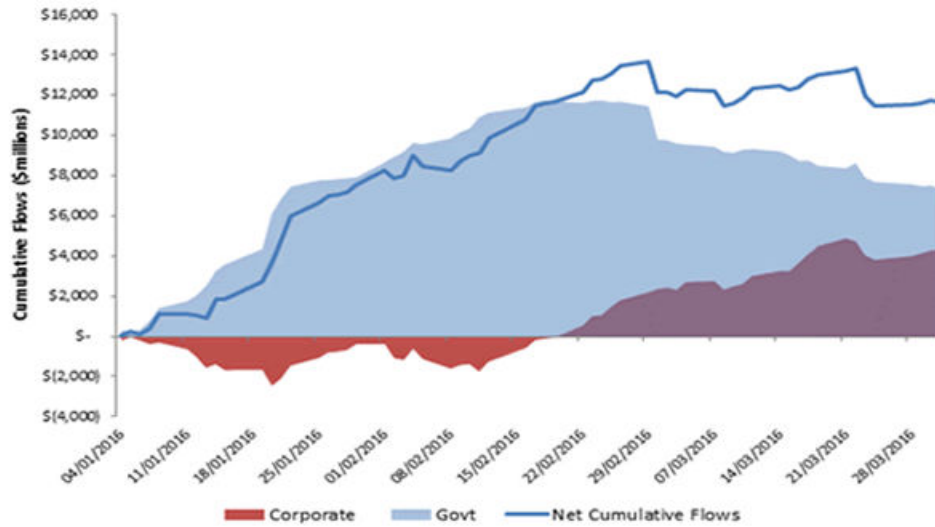
Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	25	82	3.09	43	A -
Barclays	89	136	31	148	A
Citigroup	45	105.5	15	42	A
Commerzbank	65	116	26	50	A+
Credit Suisse	112	153	25	158	A
Deutsche Bank	171	202	45	200	A+
Goldman Sachs	45	111	5	36	A
HSBC	70	109	28	102	AA-
JP Morgan	31	79	21	28	A+
Lloyds Banking Group	55	109	38	107	A
Morgan Stanley	42	111	10	52	A
Nomura	31	105	3.4	52	A-
Rabobank	23	69	21	49	AA-
RBS	85	133	26	110	A
Soc Gen	40	88	25	20	A
UBS	52	76	28	57	A

Source: Meteoram.com, 11th April 2016

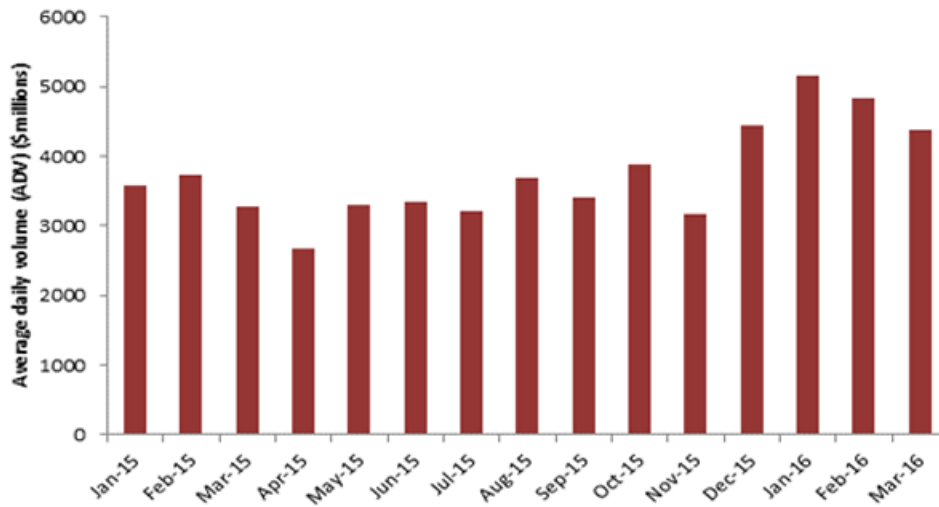
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Government Bonds

Talk to most mainstream investors and they'll probably agree that bonds don't represent great value. Prices have shot up in recent years whilst yields have fallen almost as fast as interest rates. In these circumstances it's hard to mount the argument that fixed income securities represent good value. But credit's poor fundamentals haven't stopped ever larger amounts of money flowing into the asset class. Exchange traded funds in particular are becoming hugely popular amongst bond investors and a recent note from Blackrock iShares observed that the first quarter of 2016, there had been record levels for use of fixed income ETFs; global industry inflows of \$43.5bn. According to Stephen Cohen, Head of Fixed Income Beta at BlackRock "Q1 2016 was a landmark quarter for fixed income ETFs, one in which we saw record inflows into global (\$43.7bn) and U.S. (\$31.8bn) fixed income ETFs". According to iShares the first six weeks of 2016 were dominated by significant flows into government bonds. By mid-February corporate bond ETFs as well as emerging market debt started to take off, as the charts to the side indicate. According to BlackRock "the increased global demand for credit ETFs was driven by demand for yield on expectations of Bank of Japan and European Central Bank (ECB) easing." German government bonds were in particular demand - German 10 year bunds are now yielding just 0.16% per annum, close to all-time lows.



Source: BlackRock iShares



Source: BlackRock iShares

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	30.75
Germany	17.45
Japan	45
United Kingdom	35
Ireland	61
Italy	113
Portugal	243
Spain	86

Eurozone peripheral bond yields

Country	March 11th, 2016	April 15th, 2016	Spread over 10 year
Spain 10 year	1.48%	1.49%	133
Italy 10 year	1.32%	1.34%	118
Greece 10 year	8.91%	9.37%	921

	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

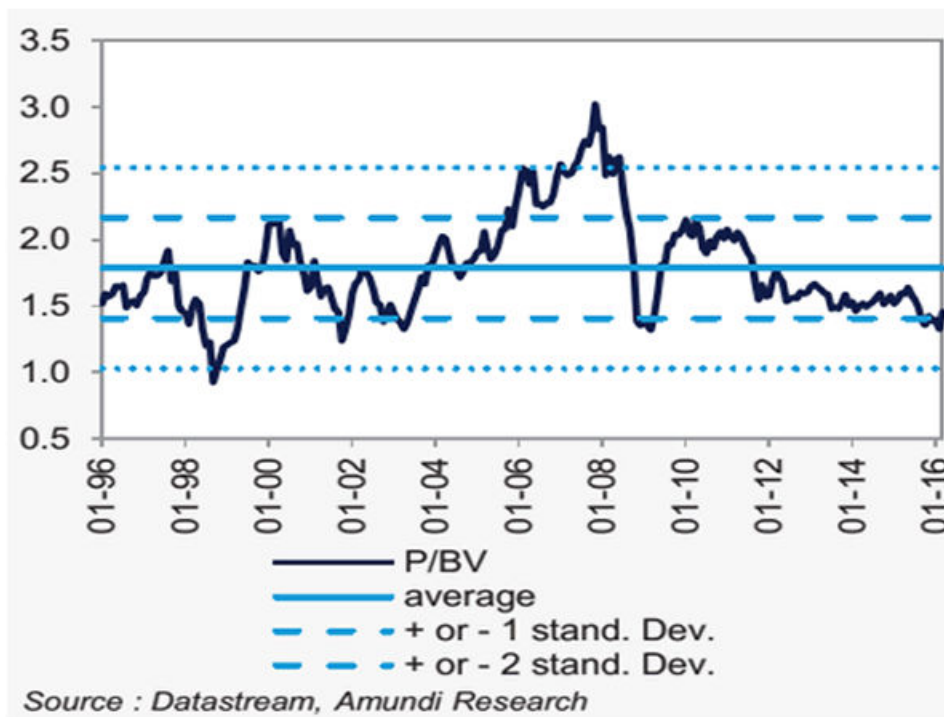
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Equity Markets and Dividend Futures

Emerging markets have had a torrid few years. Prices have slumped which has inevitably meant that emerging markets have experienced huge net outflows over the past four years, wiping out most of the net inflows from the start of 2009 to the end of 2012. In terms of cumulative flows since 2009, of the 200 billion dollars that had been invested in this asset class, only 50 billion dollars remain today. Yet in the last three months emerging markets look like they might have finally turned a corner. According to Bloomberg an index of top 20 EM currencies has just put in the best performance for 18 years while over in the equity space, the MSCI Benchmark Index has had a cracking start to 2016. It's up a stonking 9.31% in the last three months and 3.6% in the last month! That is a big turnaround from 2015 when the index slumped 15%, following three previous years of losses (in 2012 the decline hit 18%). The chief beneficiaries of this surprising rebound? Brazil, Turkey, Russia and South Africa.

The tailwind for this revival is fairly obvious. The US Fed looks like it might be slowing down its rates normalisation policy and the dollar has now taken a hit. Analysts at Cross Border Capital in London - their research is very widely read in the hedge fund community - now reckon that the big tectonic shift of the next year or so is actually a weakening dollar. Last but by no means least many EM economies have been helped by rising oil and commodity prices.

Some investors have also jumped back into the space because they view EM equities as cheap. If one believes the market consensus EM equities look reasonable value, especially if you look at the chart below, which is from analysts at Pan-European Asset Manager Amundi. Their analysis suggests that the price-to-book value (1.42x based on MSCI data) has "returned to a level comparable to March 2009 and March 2003. Return on equity, meanwhile, has fallen from a peak of 17% in 2008 to 10% today. Price to book value does remain higher than its low of September 1998 (0.92) or even October 2001 (1.24). In relative terms compared to developed markets it is just below its 10-year average (0.65 vs. 0.77) and about twice as high as in September 1998 (0.31)."



Looking to the future most analysts in the consensus estimates are now expecting an end to the four year earnings drought in 2016 although analysts at JPMorgan reckon that instead of a 7% advance in earnings we could see a 7% decline in profits putting EM stocks on a forward multiple of closer to 14.5 – rather less a bargain. Analysts at Amundi make a powerful point about investors' expectations for the future. They argue that markets have seen an impressive tactical bounce back this year so far but for it to continue, "we need to see some hard evidence of a much bigger 'cyclical swing'. For that to happen we need four conditions to be met:

- China's economy will have to continue to stabilise, given its influence over other emerging economies;
- Oil and industrial commodities will also have to continue to rally;
- The (Chinese) renminbi will have to remain stable;
- The US dollar must not rise too much, even when the Fed raises interest rates. If these conditions are met, emerging markets could well be the positive surprise of 2016."

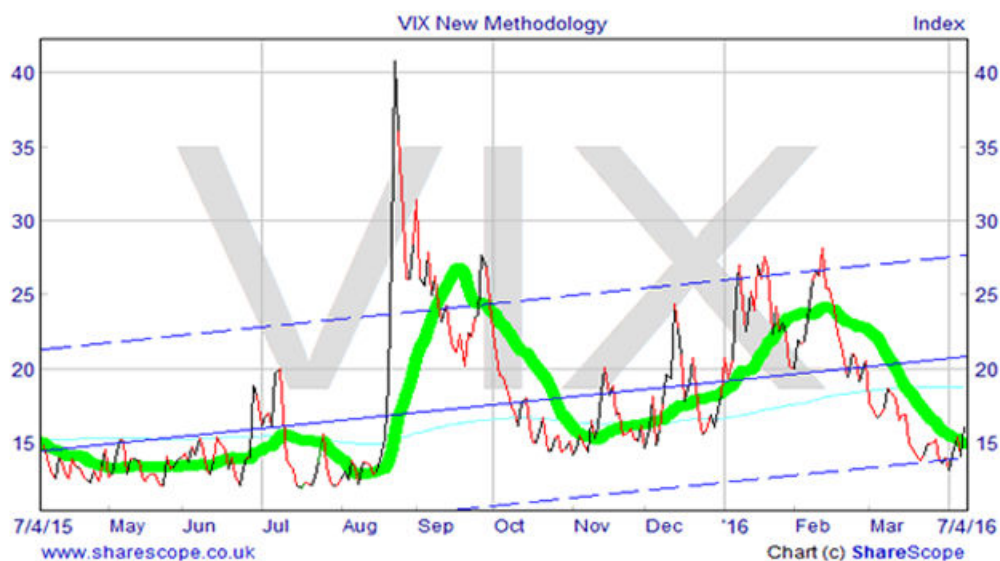
Index	April	March	Reference Index Value	Level 6 Months Ago
Eurostoxx 50	118.6	118	3049	116.5
FTSE 100 (Dec 14)	247	246	6340	N/a

Name	Price % change						Close
	1 month	3 months	6 months	1 year	5 year	6 year	
FTSE 100	3.09	7.55	1.52	-10.04	6.73	9.81	6365.10
S&P 500	3.13	8.37	4.44	-0.62	58.44	72.04	2082.78
Benchmark for gilt							
iShares FTSE UK All Stocks Gilt	0.61	2.67	2.49	0.22	21.5	24	12.7725
Benchmark for volatility							
VIX New Methodology	-18.91	-42.71	-23.90	0.37	-15.67	-11.99	13.72

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Volatility

With market turbulence - measured by volatility measures such as the VIX - ebbing away, investors have been left wondering what to worry about. The chart below shows the widely followed VIX measure which tracks US equities - the chart shows the trend for the last 12 months (gently upwards). It also shows the 200-day moving average (the very thin blue line) as well as the 20-day moving average (the thick green line). The VIX has broken through all key measures and is now testing its lower support levels.



Luckily British investors do have something rather important to worry about - the threat of a Brexit. Many international investors have gone on record as saying that they are concerned by the prospect of an exit from the EU. Unfortunately for these investors the numbers certainly seem to suggest that the Leave campaign is making progress. Currently the Bloomberg Number Cruncher Politics Referendum Forecast engine reckons there's a 24% chance of Britain voting to leave the EU but other data is even more positive for the Leave campaign. I recently talked to one leading fund manager - who wanted to remain anonymous - who's been methodically cross checking every measure of the debate. He observed that in 2016, in the 44 polls he'd tracked, the average results were 44% to remain and 41% to leave. However, he also suggested that 65% of those polls resulted in a vote to stay "and therefore a forecast based upon that data set would give a 65% chance of staying. But our current estimate is 55% to 60% to remain, which effectively modifies the 65% down to reflect what seems to be a gradual erosion of the "stay" vote and the greater risk of news that favours the "exit" vote (Greece, etc.)". The big table below is from a leading Financial Times blog and shows the forty plus polls taken in 2016 so far - and the running average which is 43% to stay and 42% to leave.

Full list of individual polls in 2016 tracked so far

Stay %	Leave %	Undecided %	Date	Pollster	Sample
39	39	17	Apr 12, 2016	YouGov	1,693
35	35	30	Apr 11, 2016	TNS	1,198
42	45	12	Apr 10, 2016	ICM	2,030
40	38	16	Apr 7, 2016	YouGov	1,612
39	38	18	Apr 4, 2016	YouGov	3,754
51	44	5	Apr 3, 2016	ORB	800
44	43	13	Apr 3, 2016	ICM	2,007
39	43	18	Apr 1, 2016	Opinium	1,966
41	45	12	Mar 29, 2016	BMG Research	1,518
35	35	30	Mar 29, 2016	TNS	1,193
51	49	0	Mar 28, 2016	ORB	2,002
45	43	12	Mar 24, 2016	ICM	1,970
49	41	8	Mar 22, 2016	Ipsos Mori	1,023
48	41	11	Mar 20, 2016	ComRes	1,002
41	43	17	Mar 20, 2016	ICM	2,000
46	35	19	Mar 19, 2016	Survation	1,006
47	49	4	Mar 14, 2016	ORB	823
36	36	28	Mar 14, 2016	TNS	1,216
43	41	16	Mar 13, 2016	ICM	2,031
45	40	12	Mar 11, 2016	Greenberg Quinlan Rosner Research	2,282

40	41	19	Mar 6, 2016	ICM	2,051
40	37	18	Mar 3, 2016	YouGov	1,695
40	35	18	Mar 2, 2016	YouGov	1,705
39	37	19	Mar 1, 2016	YouGov	2,233
41	41	18	Feb 29, 2016	ICM	2,003
41	38	16	Feb 25, 2016	YouGov	1,731
44	41	15	Feb 12, 2016	BMG Research	1,517
37	38	20	Feb 23, 2016	YouGov	3,482
52	39	10	Feb 22, 2016	ComRes	1,000
42	40	17	Feb 22, 2016	ICM	2,021

Source: <https://ig.ft.com/sites/brexit-polling>

Measure	April Level	March Level	February Level	January Level
VoxOx Volatility	20.64	24.11	36	30.39
Vets Volatility	14.84	17.71	30.38	24.02
FTSE Put Call Ratio	N/a	N/a	N/a	0.99

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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.

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