



With commentary from David Stevenson

Deary, deary me. The start of 2016 is currently shaping up as one of the worst on record. Strangely though the ingredients for the current malaise haven't changed very much from late last year. China is possibly having a harder soft-landing than expected or even just a hard landing, depending on whom you talk to. Oil prices continue to slide, as predicted on these pages. I stick to the view that oil markets won't settle until we're below \$20. Investors are also still fretting about a global slow down with even Fed boss Janet Yellen weighing into the debate about the risks to the downside. The only new ingredient seems to be worries about the insolvency of the big European banks, with bond investors focusing on the possible impact of negative interest rates on bank margins. Bank bond CDS rates have shot up and overall Bond yields continue to tumble - astonishingly UK Ten year gilts now yield a risible 1.31%.

But I would argue that there have been no real shocks, just a gentle sense of mortal fear overwhelming investors. The US and UK economies continue to push ahead, albeit at a slower pace. Bond investors seem to think that the current dreary impasse might shock central bankers into giving the global political elite a good kicking and deliver structural reform. Good luck with that! Bond investors are also still fretting about the huge levels of global indebtedness, but quite how they might change this deeply ingrained behaviour set is something of a mystery wrapped up within a puzzle. But it's not all unremitting despair and gloom, at least not for structured product investors. This month saw the launch of the excellent 2015 Structured Product Annual Performance Review, compiled by Chris Taylor from StructuredProductReview.com and Lowes Structured Investment Centre. The two graphic tables below tell a remarkable story - over the five years in this analysis 1875 products have been issued but only 42 have involved loss of capital. The average annualised return was 6.36%.

2015	HEADLINE DATA	5 YEAR
424	NUMBER OF PRODUCTS	1875
416	NUMBER THAT GENERATED POSITIVE RETURNS	1619
7	NUMBER THAT RETURNED CAPITAL ONLY	214
1	NUMBER THAT LOST CAPITAL	42
3.8 YRS	AVERAGE DURATION / TERM (IN YEARS)	3.7 YRS
6.8%	AVERAGE ANNUALISED RETURN	6.36%
10.34%	AVERAGE TOP QUARTILE ANNUALISED RETURN	11.54%
3.75%	AVERAGE BOTTOM QUARTILE ANNUALISED RETURN	0.72%

2015			ANALYSIS AND ANNUALISED PERFORMANCE BY PRODUCT TYPE	5 - YEAR		
STRUCTURED DEPOSITS	CAPITAL 'PROTECTED'	CAPITAL AT RISK		STRUCTURED DEPOSITS	CAPITAL 'PROTECTED'	CAPITAL AT RISK
118	56	250	NUMBER OF PRODUCTS	410	405	1060
115	53	248	NUMBER THAT GENERATED POSITIVE RETURNS	336	299	984
3	3	1	NUMBER THAT RETURNED CAPITAL ONLY	74	102	38
0	0	1	NUMBER THAT LOST CAPITAL	0	4	38
4.7 YRS	5.3 YRS	3.1 YRS	AVERAGE DURATION / TERM (IN YEARS)	4.3 YRS	5.1 YRS	3.0 YRS
4.79%	5.49%	8.04%	AVERAGE ANNUALISED RETURN	4.01%	3.81%	8.25%
6.44%	8.88%	11.12%	AVERAGE ANNUALISED RETURN OF TOP QUARTILE PRODUCTS	7.2%	8.14%	12.88%
2.83%	2.37%	5.54%	AVERAGE ANNUALISED RETURN OF BOTTOM QUARTILE PRODUCTS	0.25%	0.02%	3.38%

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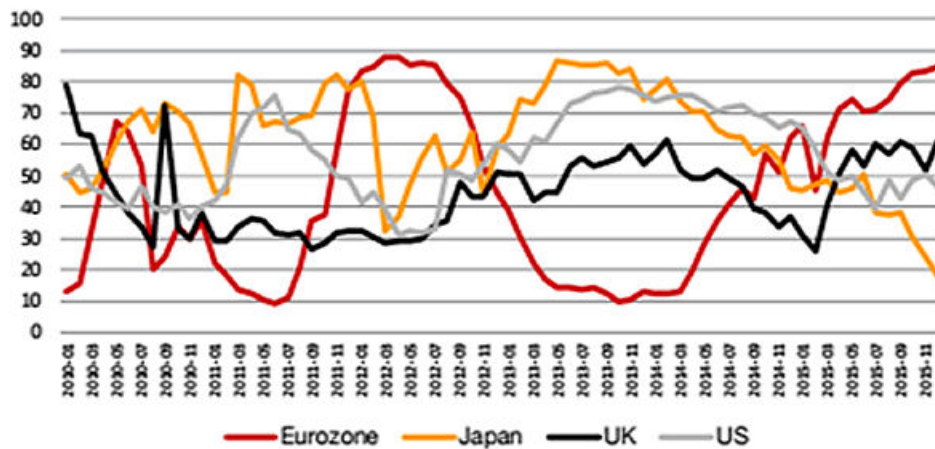
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Headline Numbers

Measure	Value as of January 14th, 2016	Value as of February 12th, 2016
UK Government 10 year bond rate	1.72%	1.31%
GDP Growth rate YoY	2.10%	1.90%
CPI Core rate	1.20%	1.40%
RPI Inflation rate	1.10%	1.20%
Interest rate	0.50%	0.50%
Interbank rate 3 month	0.59%	0.59%
Government debt to GDP ratio	89.40%	88.60%
Manufacturing PMI	51.9	52.9

Over the last few years we've kept a very beady eye on research about global liquidity trends coming out of an outfit called Cross Border Capital. This London based analytical firm produces very detailed monthly reports that are closely scrutinised by hedge funds who value its macroeconomic insight, based in large part on its forensic work on liquidity flows, originating at the national level using central bank data. In very simplistic terms in recent years if liquidity flows start to tick up, there's a reasonable chance that investors will become more bullish - and vice versa. The small chart below looks at broad trends in the key developed world liquidity markets including both central bank flows and private corporate cash flows since 2010. The stand out line on this graphic is the red one for the Eurozone. This has zig-zagged around crazily as the European Central Bank first tightened then loosed credit lines... before loosening them again. Notice the recent very strong upward trend in recent months. The Eurozone is now running the loosest monetary policy of all its peers with no end in sight. In fact it's almost a racing certainty that the European central Bank will engage in ever more unusual quantitative easing and bond buying. Negative rates might even be on the cards at some point. This should be good news for Eurozone equities, which will benefit from a fairly simple feedback loop. Improved liquidity feeds through into increased credit advances, which in turn results in additional consumer and investment spending. That in turn might actually be good news for the UK economy, which is still - Brexit debate or otherwise - heavily dependent on the Eurozone for exports.

**Liquidity Inflows: Eurozone, Japan, UK and US
2010-2015**



Source CrossBorder Capital

Just how volatile have stock markets been this decade, shooting up and down with increasing violence? The table looks at a long run of rallies and routs dating from Spring 2010. In each case I have taken a recent high and then moved forward to the following low. You'll notice that at current levels for the FTSE 100 of around 5,650 we're not that far off the levels seen in April 2010 when this table starts. I've also

turned most of this information into a messy looking chart below – also from Sharescope – over which I have superimposed these rallies and routs.

Month	FTSE 100 Index level	Change from peak to low
Apr 10	5744	
Jul 10	4805	-16.50%
Feb 11	6091	26.70%
Feb 11	5598	-8.10%
Jul 11	6054	8.10%
Oct 11	4944	-18.44%
Mar 12	5965	20.65%
Jun 12	5260	-12%
May 13	6696	27%
Jun 13	6029	-10%
May 14	6878	14%
Oct 14	6195	-10%
Nov 14	6750	9%
Dec 14	6182	-8.50%
Apr 15	7030	13.71%
Aug 15	5898	-16.20%
Oct 15	6417	8.80%
12th Feb	5619	-11.00%
Average % DECLINE	-12.36%	
Average % INCREASE	16%	



The key point for me is that the most recent decline – from October 2015 through to January – of 11.6% is about what we'd expect for a recent post GFC/QE rout. The average fall for the last 9 routs has been around 12% although that includes smaller falls of 8% as well as much bigger 16% + declines (last seen in summer 2010).

The average post rout market increase by contrast has been a hefty 16%. If that were to happen after the lows of last week we'd see a near term bull market peak of 6,580 for the FTSE 100.

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Bank CDS options

We witnessed a remarkable turnaround over the last few weeks. CDS rates have shot up across the board as investors start to fret about bank losses in the event of a new global recession. Over the last month rates have increased for every bank in our list, implying higher funding rates. The smallest increases over the last month have been for JPMorgan, Australian bank Macquarie and Japanese outfit Nomura. The biggest monthly jumps (increases of more than 90% in pricing) have been for a long list of British banks including Lloyds and Royal Bank of Scotland. These numbers are reflected on annualised changes where CDS rates have doubled for nearly all the British banks.

Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	27	77	38	20	A -
Barclays	61	107	91	110	A
Citigroup	40	110	26	36	A
Commerzbank	78	138	50	82	A+
Credit Suisse	63	113	29	102	A
Deutsche Bank	103	175	80	160	A+
Goldman Sachs	42	110	25	24	A
HSBC	65	124	71	157	AA-
JP Morgan	41	85.5	13	26	A+
Lloyds Banking Group	35	88	81	81	A
Morgan Stanley	39	108	22	36	A
Nomura	24	84	21	-9	A-
Rabobank	24	74	43	49	AA-
RBS	62	106	81	105	A
Soc Gen	39	103	49	20	A
UBS	31	70	44	52	A

Source: Meteoram.com, 12th February 2016

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Government Bonds

The chart below tells a truly remarkable story. It shows the 10-year government bond yield starting in 1981, a mere 35 years ago when yields were above 14% through to February 2016, at which point the yield has hit an all-time low of 1.31%. Needless to say the cost of servicing UK government debt has collapsed, which in turn helps explain why the Treasury is so comfortable running an accumulated debt that amounts to just under 90% of national GDP.

UK Government Bonds 10-year Rates 1.97%

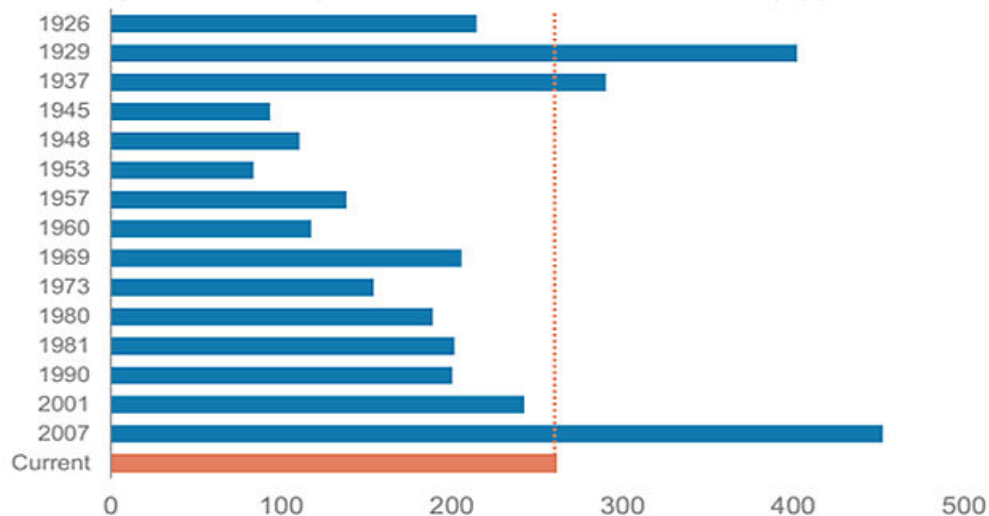


Source: <http://www.tradingeconomics.com/united-kingdom/government-bond-yield>

The collapsing UK gilt yield is of course a function of bond market jitters. Many fixed income investors worry that we are one step away from another global recession. One widely used indicator of this concern is the average spread for US corporate debts rated BBB over US 'safe' Treasury bonds. This is currently running a bit under 300 basis points. A widening spread indicates a very real fear of recession as the chart below makes clear.

Credit Spreads Higher than in Past Recessions

Average US BBB Spreads in Recession Periods (bp)



Source: Morgan Stanley Research, the Yield Book, Moody's

CDS Rates for Sovereign Debt

Country	Five Year
France	40
Germany	23
Japan	50
United Kingdom	40
Ireland	65
Italy	161
Portugal	361
Spain	107

Eurozone peripheral bond yields

Country	January 16th, 2016	February 12th, 2016	Spread over 10 year
Spain 10 year	1.78%	1.71%	149
Italy 10 year	1.56%	1.63%	141
Greece 10 year	8.64%	11.39%	1117

	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

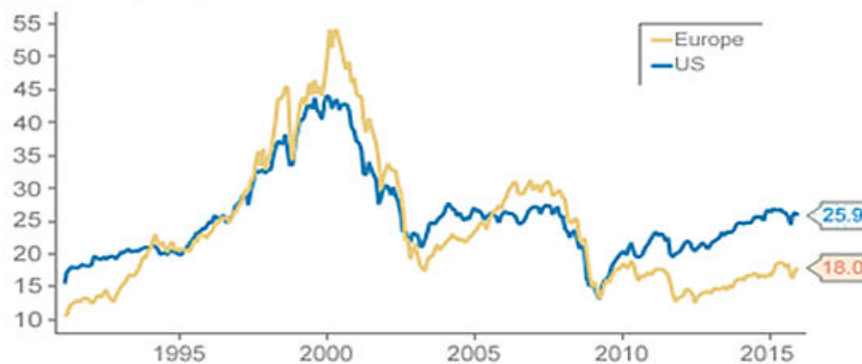
Equity markets seem to have stumbled into a peculiar groove. Every time oil prices drift lower, equity prices also pull back in sympathy. The first chart from Morgan Stanley shows the rolling one-month correlation since January 2014 between the global equities and oil prices. Notice how the correlation has consistently peaked above 50% indicating a substantive correlation.

Cross-Asset Correlation to Oil



Unfortunately, as we all know oil prices have kept falling, which has in turn dragged equity markets ever lower. But even after recent corrections equity market fundamentals, especially in the US, aren't great. The next chart, also from Morgan Stanley, looks at the cyclically adjusted price to earnings ratio (a long term measure of 'good value') for US and European shares since 1990. At 25.9 earnings, US shares are still above the recent long-term average. European shares at 18 times earnings look much more reasonable by contrast - and arguably below the long-term average.

Cyclically Adjusted P/E



Source: Morgan Stanley Research, MSCI, Bloomberg, Macrobond

The final chart below spells this out in more detail at the country level. Using IBES institutional consensus numbers, it shows that French, Spanish and Italian shares are particularly cheap.

Country Valuations

Country	2015e PE	2016e PE
France	14.1	13.4
Germany	13.3	12.5
Italy	16	13
Switzerland	16.6	15.4
Spain	12.9	11.9
Netherlands	16.2	14.2

Index	February	January	Reference Index Value	Level 6 Months Ago
Eurostoxx 50	115.6	115.3	2737	116.5
FTSE 100 (Dec 14)	234.45	234.47	5536	N/a

Name	Price % change						Close
	1 month	3 months	6 months	1 year	5 year	6 year	
FTSE 100	-5.7	-12	-17	-18.79	-8.67	7.27	5536
S&P 500	-5.7	-12	-12	-11.58	37.61	69.6	1829
Benchmark for gilt							
iShares FTSE UK All Stocks Gilt	4.53	5.88	4.23	3.14	25	26	12.92
Benchmark for volatility							
VIX New Methodology	15.8	75	105	66	79	17.45	28.14

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Volatility

One of the most peculiar aspects of the recent market turmoil is that although stock markets would appear to have climbed a wall of fear, technical measures of market volatility such as the VIX have increased by nowhere near the same degree. With the S&P 500 having fallen more than 10% this year, a closely watched barometer of investor sentiment, the CBOE's VIX Index, has only climbed modestly above its long-term average of 20 in recent weeks. At its current reading of 25.2, the VIX is still well below its most recent closing peak of 40.7 from August 2015. One explanation could be that markets have been consistently turbulent, grinding ever lower rather than shooting up and down. i.e. steadily falling. In Europe the market fall has been even more severe. The EuroStoxx 50 Index has tumbled 16.8% this year, almost twice the S&P 500's fall, and implied volatility is higher. The VStoxx Index, measuring the implied 30-day volatility of EuroStoxx 50 equities, sits at 32.3 - not far off August 2015 highs.

Stock market analysts have grown increasingly curious about the relationship between stock market activity and the VIX Index in particular. Goldman Sachs options researcher Krag Gregory, in a January 25 research report, observed that the VIX has "undershot S&P 500 daily moves by an aggregate of about 6.5 vol points year-to-date." According to Gregory there's a number of explanations. He observes that investors that want to be overweight US equities entering 2016 were few and far between. What this means is reduced U.S. equity exposure results in a lesser need for hedges entering the year, thus a lower VIX. There's also some evidence that investors have been selling VIX rallies near the outer band of the VIX trading range.

Measure	February Level	January Level	December Level	November Level
Vstoxx Volatility	36	30.39	24.73	25.1
VFtse Volatility	30.38	24.02	16.93	19.56
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 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.

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

Kind Regards,



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