To view this email in your browser, please click here

UK Structured™ Products Association

Monthly Market Report

December 2019

With commentary from David Stevenson

Overall in investment terms, I'm still cautiously optimistic though I would emphasize that word cautiously. I currently don't see any obvious immediate drivers pointing towards a sharp slowdown. My default hunch is that we are - as I have said before - mid-way through a pause for growth or a slowdown before a late 2019 rally. This receives some backing from funds flow data which shows that there's been a rally in risk-on assets. According to analysts at Deutsche Bank in the US we've seen a 'large rally' in risk assets for three weeks now. Crucially in the last week, we've seen the first major evidence of inflows into equity funds, following three straight weeks of inflows into corporate credit funds.

According to Deutsche last week equities overall experienced net inflows of $6.1 billion across every region - with EM (+$1.5bn) experiencing the largest inflow since February of this year. European inflows were driven by the UK (+$1.6bn) funds.

Also looking at a range of recent reports by macro economists at the big banks I think we can say that a consensus is building up, which is cautiously optimistic - with equity markets bullish off the back of this consensus. In sum although economic data remain soft overall, there are signals that the decline in global manufacturing that started in early 2018 may be coming to an end which reduces recession risk further, even if little points to a sharp recovery in trade and investment for now. Crucially monetary policy is supportive across regions, but any optimism on growth also relies on the ongoing trade talks to deliver the expected de-escalation. Better watch those tweets.

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

Decarbonisation changes everything

You may have noticed that outside the Brexit bubble things are moving on the whole Climate Change/Green New Deal agenda. Lizzie Warren looks likely to face off with old Donald and I have no doubt that green politics will be at the centre of the general election next year.

On many levels, I'm slightly despondent about this. We desperately need to take the culture wars out of the climate change debate but Trump sees political advantage in using climate change as a weapon in his war against the liberal swamp/establishment and the Democrats are happy to oblige by tacking on a whole bunch of incredibly daft social justice freebies.

My great hope is that we can keep these debates away from the ideologues and culture warriors and stick with practical steps that can help cut down hydro carbon usage. It should also represent a huge investment opportunity, if done properly. Over the last few months we've seen a bunch of reports by investment banks looking at this subject with one of the most comprehensive coming from the cross disciplinary research team at Morgan Stanley, who've been doing some excellent work in this area. The report is called Decarbonisation: The Race to Net Zero and it is an excellent primer on the scale of the challenge and how much money needs to be spent (a lot). The infographic below I think nicely sums up the scale of the challenge. Sure, it'll cost a great deal of money but the investment implications, both positive (new businesses to invest) and negative (all those stranded assets at the major energy companies) are impossible for investors to ignore.

Exhibit 1:

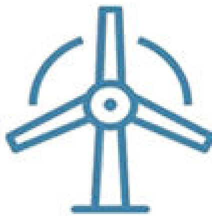
Achieving the Paris Agreement targets: Decarbonisation in numbers

ENERGY-RELATED CO2 EMISSIONS ACCOUNT FOR ~ **TWO THIRDS** OF GLOBAL GREENHOUSE GAS EMISSIONS ANNUALLY.

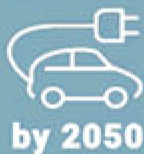
1.92
TCO_2 / CAP

TO BE ON TRACK FOR A 2DS, ENERGY-RELATED CO2 EMISSIONS MUST FALL BY 55% TO **1.92 TONNES PER CAPITA** IN 2040. SINCE RECORDS BEGAN IN 1960, THE LOWEST RECORDED EMISSIONS HAVE BEEN 3.1 TONNES PER CAPITA.

24,000 GW OF NEW RENEWABLE GENERATION CAPACITY NEEDS TO BE BUILT **BY 2050** – 11X THE AMOUNT OF RENEWABLE CAPACITY TODAY



OVER **1700 CCS PLANTS** NEED TO BE FITTED TO POWER STATIONS AND INDUSTRIAL FACILITIES BY 2050. THIS COMPARES TO 18 IN OPERATION TODAY.

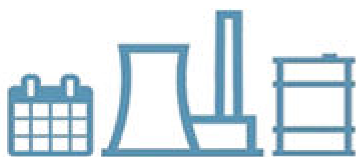


924 MILLION ELECTRIC VEHICLES MUST BE ON OUR ROADS GLOBALLY BY 2050.

IF 4 GT OF CO2 IS SEQUESTERED P.A. IT WILL TAKE OVER **3500 YEARS** TO USE UP THE ESTIMATED UNDERGROUND STORAGE THAT IS AVAILABLE GLOBALLY.

THE CLEAN HYDROGEN MARKET MUST PRODUCE **78 EJ OF HYDROGEN** BY 2050, SAVING 6GT OF CARBON DIOXIDE. THIS IS THE SAME AMOUNT AS THE WHOLE INDUSTRIAL SECTOR EMITS TODAY.

2.5 BILLION TONNES OF WASTE OIL WOULD BE CONVERTED INTO RENEWABLE BIODIESEL - ENOUGH TO FUEL 1.2 BILLION CARS PER ANNUM.



2025 IS THE DATE FOR PEAK OIL IN THE IEA'S PARIS-ALIGNED SUSTAINABLE DEVELOPMENT SCENARIO WITH GAS PEAKING FIVE YEARS LATER.

$40 IS THE NECESSARY STARTING POINT FOR A GLOBAL CARBON PRICE WITH ABOVE INFLATION INCREASES FOLLOWING.

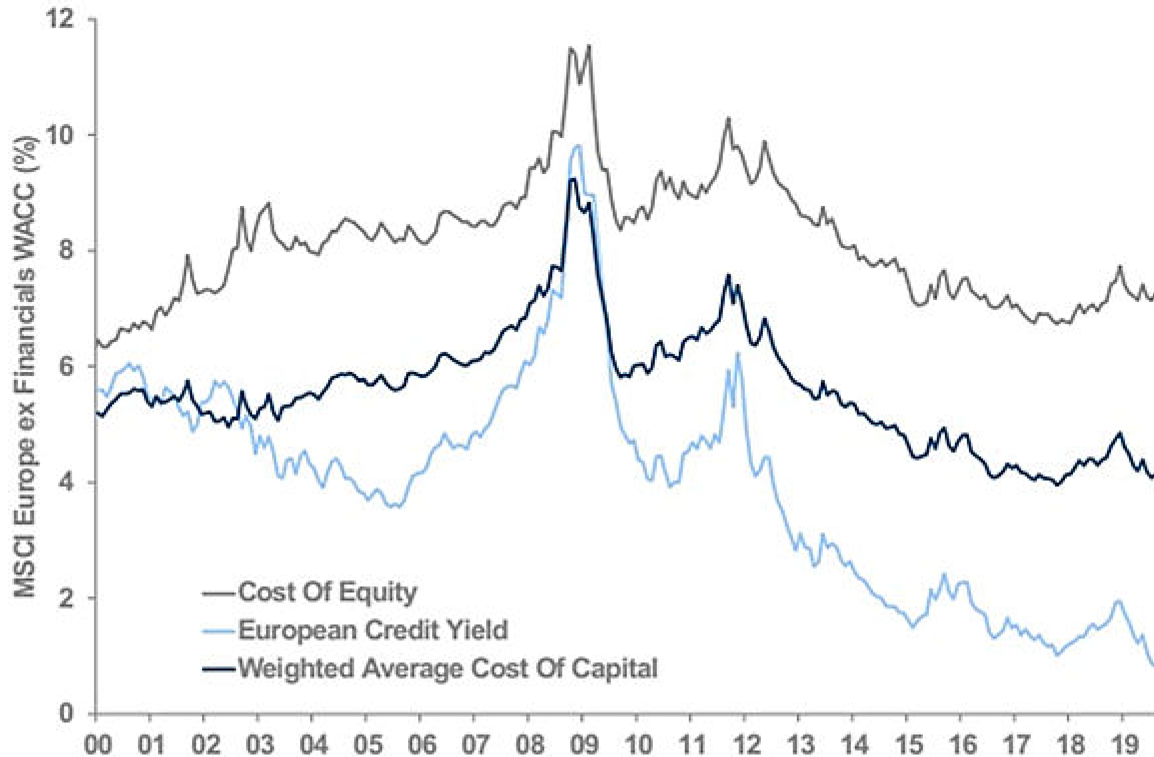
Source: Morgan Stanley Research

What ails Europe

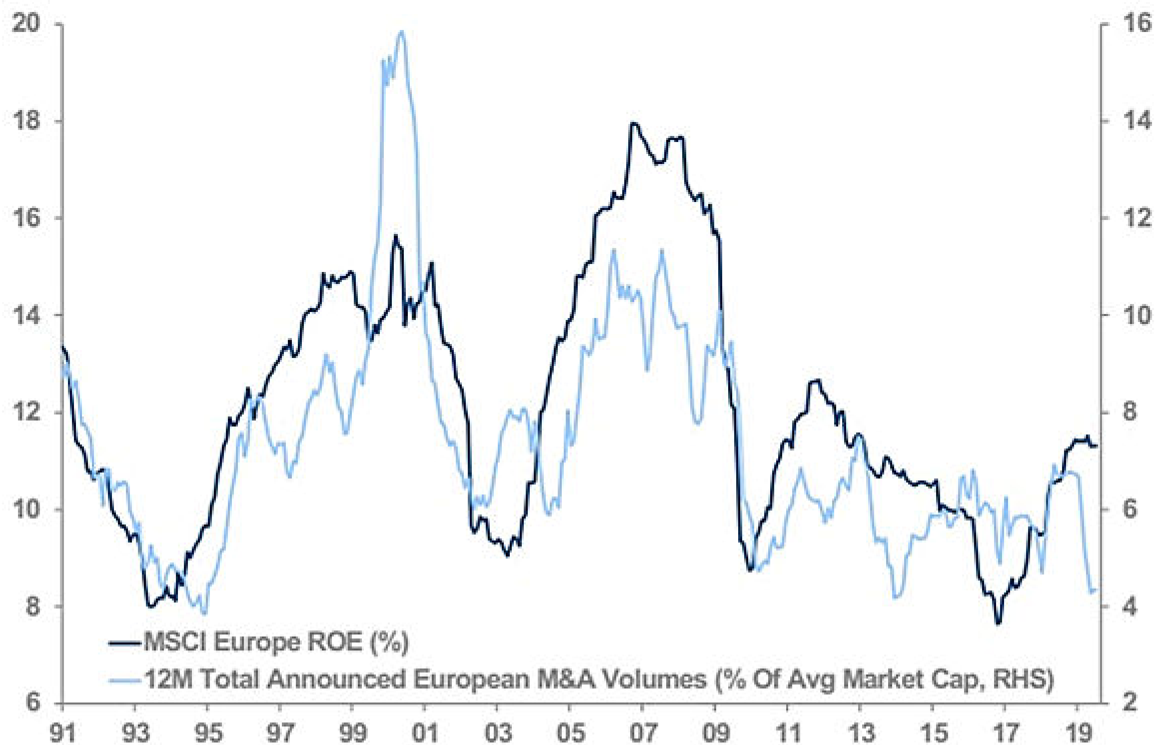
The most striking structural issue facing investors at the moment is the low growth rate of the Eurozone. Both China and the US seem fairly resilient in their own very distinct ways, but Europe seems mired in deflation and really very low growth rates. Obviously, these rates vary within the Eurozone but overall Europe looks more than a little anaemic.

Understanding what's going on involves examining a series of overlapping issues such as an ageing population, inefficient fiscal and monetary policy and of course the behaviour of corporates within the

Eurozone. A bunch of charts I dug out from a report by analysts at Morgan Stanley on private equity might contain some hint of an answer. The first is the weighted average cost of capital which is near all-time lows. This suggests that cost of capital and perhaps access to capital (for larger corporates) isn't an issue.



BUT this low cost of capital might also be implicated in another phenomenon - return on equity is also declining. The driver here is in effect stagnation. Low-interest rates are a result of low growth rates and low inflation. This, in turn, feeds through to slow earnings growth and low returns on equity. The chart below again from the MS report on private equity suggests that M&A activity is down substantially because Return on equity in Europe has been declining for some years.



But maybe we can't entirely blame corporates for this behaviour. Maybe 'conservative' institutional investors have played a role. As public markets have become increasingly momentum-driven and short termist, investors have started to punish businesses that spend too much on capital investment.

On one level this behaviour is not entirely unjustified if the return on equity is low - why invest in more capital if returns from that investment are so low? But how will corporates break out of a cycle of low returns if they don't burn through some capital to increase productivity rates? By contrast, this market behaviour seems to reward those businesses which hit or exceed their earnings expectations targets. In sum, Europe seems trapped in something of confidence and returns trap, exacerbated by low-interest rates and 'conservative' institutional investors - and corporate elites happy to play cautiously.

Measure	Values as of 8th October, 2019	Values as of 11th November, 2019
UK Government 10 year bond rate	0.47%	0.80%
GDP Growth rate YoY	1.30%	1.00%
CPI Core rate	1.70%	1.70%
RPI Inflation rate	2.60%	2.40%
Interest rate	0.75%	0.75%
Interbank rate 3 month	0.76%	0.79%
Government debt to GDP ratio	84.70%	81.70%
Manufacturing PMI	48.3	49.6

Back to menu

Bank CDS options

Not much to report this month for the market in credit default swaps on bank debt. Overall the trend in pricing is upwards but only from relatively low levels. Both Rabobank and UBS have seen some fairly steep increases in pricing hut again we need to take this with a tiny pinch of salt as both have swaps that

are lowly priced compared to their peer group.

Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	10.42	36.36	23.00	-39	A -
Barclays	29.01	61.24	-4.4	-2.19	A
BNP Parabis	11.27	34.4	26.63	-17.93	A
Citigroup	18.69	60.98	3.16	19.88	A
Commerzbank	7.74	50.73	24.9	n/a	A+
Credit Suisse	19.99	53.51	23.27	10.32	A
Deutsche Bank	36.48	85.3	12.42	n/a	A+
Goldman Sachs	27.62	67.789	2.49	9.55	A
HSBC	13.35	38.58	14.16	-0.12	AA-
Investec*	n/a	59	n/a	n/a	BBB
JP Morgan	19.54	46.89	6.91	13.58	A+
Lloyds Banking Group	18.74	82.08	2.32	14.89	A
Morgan Stanley	25.62	65.09	2.32	14.89	A
Natixis	n/a	43	n/a	n/a	A
Natwest Capital Markets	30.97	82.92	0.9	-11.65	A
Nomura	17.92	80.15	7.18	n/a	A-
Rabobank*	7.23	32.57	45.39	-29.86	AA-
RBC	n/a	57	n/a	n/a	AA
Soc Gen	10.02	36.91	5.86	-18.18	A
UBS	8.16	26.5	32	28.12	A

Source: www.meteoram.com 25th September 2019
*Model implied CDS rate is the 5 year model CDS from the Bloomberg Default Risk function

Back to menu

Government Bonds

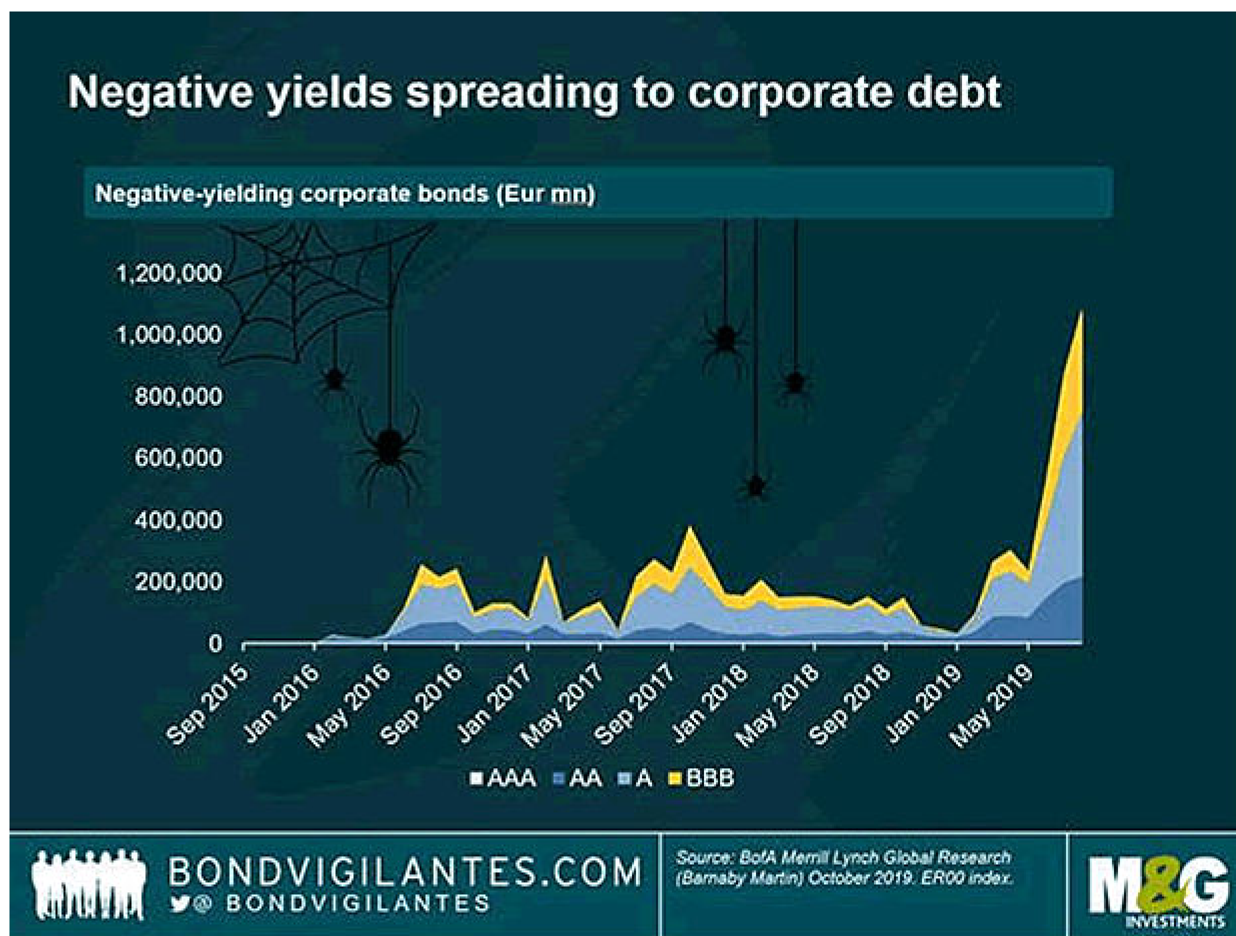
Fixed Income

A quick observation this month on negative yielding bonds, again.

By some estimates there's currently $14 trillion of debt that is yielding negative yields i.e. investors will crystallise a loss if they hold to maturity. The vast majority of this debt is owed to governments but a small, yet growing proportion is corporate debt.

As part of its regular Halloween update, the Bond Vigilante team at M&G recently brought one of their scary charts (cue the spiders webs) for investors which shows the full extent of this challenge.

The chart below shows the face value of negative-yielding debt in the ICE BofAML Euro Corporate index: now as high as €1 trillion! Most of this negative-yielding corporate debt is actually in the lower end of investment grade, namely A and BBB. Nothing to worry about there then!



UK Government Bonds 10-year Rate 0.80%

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

CDS Rates for Sovereign Debt

Country	Five Year
France	18.47
Germany	9.04
Japan	22.75
United Kingdom	24.8
Ireland	26.3
Italy	114
Portugal	34.34
Spain	33.79

Eurozone peripheral bond yields

Country	October 2019	November 2019	Spread over 10 year
Spain 10 year	0.13%	0.43%	68
Italy 10 year	0.85%	1.26%	151
Greece 10 year	1.48%	1.37%	162

	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

Index	October 2019	November 2019	Reference Index Value	Level 6 Months Ago
Eurostoxx 50	121.7	122	3696	121.8
FTSE 100 (Dec 17)	327	328	7328	n/a

As I've already noted in the opening section of this report, there is growing evidence that we may - just may - have avoided a nasty global recession (this time) and that markets might continue slowly but steadily advancing. Plenty could go wrong but with a fair tailwind and help from central bankers we

might be a much happier place by the end of the year. Sooner or later though that gently uptick in optimism will need to feed through into increased earnings. The evidence for this is a bit thin on the ground as we enter the Q3 earnings season which is well underway. So far, we've had about 68% of the S&P500 and 34% of Eurozone stocks reporting earnings.

What does these numbers tell us about the rebound in profits? Charles Stanley runs its own Earnings Tracker, and here's their summary at the beginning of November:

- In the US, results have been slightly better than expected, though consensus earnings estimates have been downgraded over the reporting season.
- In the US, 78% of those that have reported have beaten earnings estimates by an average of 4%. Earnings are up 4% at the index level on the same period last year.
- S&P500 companies have so far reported top-line growth of 7% on the same period last year with 60% beating sales estimates.
- The EuroStoxx is recording earnings growth of -1% over the same period last year. Sales are up only 1%
- With only 12 FTSE 100 companies reporting, energy companies are having a big influence on the figures. As a result earnings growth is particularly weak, running at -9% over the last twelve months.
- In Japan, beats are lower than in the US and Europe. Only 18% of companies on the Topix are beating earnings estimates and 28% are beating sales estimates. However, the Topix is just seeing positive growth of 4% in earnings for the third quarter, while sales are up 3%.

Charles Ekins of research and fund management firm EkinsGuiness has also been tracking these numbers and has helpfully published a very handy graphic summary of where we are in terms of corporate profits growth –as the table below shows across most sectors, earnings estimates are still largely in the red in most regions. The only positive story seems to be for IT and to a slightly lesser degree, healthcare.

Global Earnings Expectations

Percentage Change over last 4 Weeks in Current Year EPS estimates

(Market Cap Weighted Average of 5,384 Companies in Sample)

% Change	GLOBAL	USA	Canada	UK	Europe ex UK	Japan	Australia	Asia ex Japan
TOTAL	-1	-1	-3	-2	-1	-1	-2	0
- Oil & Gas	-6	-7	-1	-5	-5	-10	-7	-3
- Basic Materials	-5	-5	-6	-8	-3	-4	-5	-8
- Industrials	-3	-4	-13	-1	-1	-3	1	0
- Consumer Goods	0	1	-4	-1	-1	-2	-1	0
- Healthcare	1	2	-1	0	0	1	1	7
- Consumer Services	-1	-3	1	1	0	1	0	10
- Telecoms	-2	1	-2	-3	-5	-3	-1	-2
- Utilities	0	0	3	-1	0	0	1	-3
- Financials	0	1	-1	-1	-1	1	-3	-1
- Technology	1	2	-1	-1	-1	2	2	0

Name	Price % change						Close
	1 mth	3 mths	6 mths	1 yr	5 yr	6 yr	
FTSE 100	1.12	1.03	1.74	3.14	10.6	8.92	7328
S&P 500	3.82	5.65	7	10.09	51.2	74	3083
iShares FTSE UK All Stocks Gilt	-1.06	-2	3.74	7.08	17.1	23.7	13.88
VIX New Methodology	-22.5	-32	-24	-30	-6.58	-3.67	12.07

Back to menu

Volatility

It looks like investors have regained their confidence and are aggressively buying into a new bull market rally. The flip side of this is that measures of stockmarket volatility have dropped sharply in recent weeks. The main fear gauge, the VIX currently stands at just over 12, well below its 20- and 200-day moving average. It's down about 30% over both the last three months and the last year.

Yet it's hard not to think that this return of bullish behaviour might be a tad problematic, especially in the US. Regular readers will know that I am somewhat sceptical about the valuation of US equities. Anyone wanting evidence for this scepticism should read the excellent market summaries by Lance Roberts of RIA, Real Investment Advice in Texas. Lance has also noticed that equity investors are in bullish mood but reckons that investors are taking on excessive risk, and "thereby virtually guaranteeing future losses, by paying the highest S&P 500 price/revenue ratio in history and the highest median price/revenue ratio in history across S&P 500 component stocks". The table below nicely sums up why current subdued market volatility for US equities might not last much longer.

S&P 500 Valuations		
Factors	Most Recent Value	Historical Percentile
Margin-Adjusted P/E (MAPE)	46.0	99%
Median EV to Sales (Ex-Financials)	3.1	99%
US Total Market Cap to GDP	144%	99%
EV to Free Cash Flow Margin-Adjusted (Ex-Financials)	41.1	98%
Median Price to Sales	2.6	97%
Cyclically Adjusted P/E (CAPE)	33.2	96%
Median Price to Book	3.4	96%
Median EV to EBITDA (Ex-Financials)	12.6	94%
Source: Bloomberg, Yale/Robert Shiller, John Hussman	*Numbers as of July of 2019	©2019 Crescat Capital LLC

Measure	November Level	October Level	September Level	August Level
Vstoxx Volatility	13.09	18.3	18.15	18.1
VFTSE Volatility	n/a	n/a	n/a	n/a

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 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 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 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.

Kind Regards,

Zak De Mariveles
UK Structured Products Association Chairman
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

UK Structured Products Association, 1A All Saints Passage, London, SW18 1EP