UK Structured™ Products Association

Monthly Market Report

December 2017

With commentary from David Stevenson

Beyond the Brexit debate

One of the myths lurking behind the Brexit debate was the Sick Man of Europe idea. The argument went something like this: The EU and the Euro will doom the continent to low growth rates because of a constraining monetary union, centralisation and too much bureaucracy.

Observers of Brexit on the continent could now be forgiven for feeling a touch of Schadenfreude as the tables are turned. Now Europe is powering ahead and the UK is stuck in the slow lane. But I always thought that this worry about Europe spoke to a much less ideological concern - Europe collectively (including a soon to exit Britain) just isn't that important anymore.

First off though the good news for investors in Europe, over the short term at least. European equities have had a strong 12 months. In dollar terms the region's equity markets have increased in value by 1.9% over the last month, 5.2% over the last three months and 24.9% over the last 12 months. But even after these increases European equities are still below average in valuation terms - based on 2017 estimates for the full year European equities are valued at 16.5 times earnings compared to 17.7 times earnings for the MSCI World which includes all developed world countries. Looking into 2018, according to IBES numbers, European equities are 15.1 times earnings compared to 16 times for the rest of the developed world. These relatively low valuations, plus the evident momentum in local share prices suggests that local equities could go even higher in price.

But despite these tailwinds European corporates are facing a deeper structural problem - they increasingly don't matter when compared to US and EM equities, with earnings growth notably lagging. This is the slightly alarming conclusion contained in a weekly note from Andrew Lapthorne, chief quantitative strategist at French bank SocGen. Lapthorne observes that in the ten years since the start of the financial crisis the US equity market "has gone from strength to strength and now represents over 50% of the world's market capitalisation, a level not seen since 2001". According to the SG strategist most of that market share gain has been at the expense of Europe, where market cap share has dropped from 30% to 20% over the same period.

According to Lapthorne some of this could be "due to the over valuation of US equities versus the rest of the world, and to a certain degree that may be true. However, the bigger reason is perhaps more worrying for Europe; European quoted sector profits are now only 50% of US quoted sector profits, having been the roughly same just prior to the financial crisis, and are now back at levels last seen in 1984 when there were far fewer listed European equities." Crucially emerging markets are also taking a bigger share of profits, with the MSCI EM index now representing 16% of global earnings compared 10% in 2007 - "a number that excludes a significant number of China A shares that also continue to gain global market share" according to Lapthorne.

The Bottom line? Europe is increasingly irrelevant in global investment terms compared to the US and emerging markets - and their corporates are also proving less profitable. Or as Lapthorne puts it: "With the US already dominating and Emerging Markets inevitably getting bigger, the question for policy makers in Europe is how to reverse this now significant down trend?"

Source: SG Cross Asset Research/Equity Quant

SG Cross Asset Research/Equity Quant.

Oil, again

Whisper it but the energy market might be at a key turning point - which might be good news for the widely held energy equities sector. I've already mentioned on these pages that I think the key concern for many will be if oil prices break out of their $40-$60 trading range, with an emphasis on the upper trading range. Which is of course exactly what they have done in recent weeks! The mood on crude oil markets continues to improve, as global stock-decreases accelerate and US exports rise to more than 2mb/d. Crucially the financial markets have started to pay attention: money manager positioning on **WTI crude** oil is catching up with Brent crude, with money managers increasing their long positions significantly. According to one expert short bets on WTI now account for less than 4% of total open interest, while the number of long money managers remained unchanged at 80.

Yet this firming in prices probably won't have an immediate effect on the bottom line of most quoted US and European energy stocks. To underline this point a rather cautious note last week from analysts at Goldman Sachs observed that in terms of reporting results, 28 E&Ps/supermajors, representing approximately 47% of gross 2017E US oil production, have released 3Q results thus far, "with aggregate US oil production relatively in-line with our estimates". Crucially though the GS analysts observe that " if producers look to keep capital budgets closer (or below) today's levels, we could see potential for lower production growth vs. our +0.8-0.9 mn bpd growth estimate in 2018, providing risk to the downside to overall US oil growth, which would be macro bullish".

In simple, layman's terms, even the big disruptive US players are looking to rein in their capex spending. If this is a genuine signal for sustainable, higher, oil prices, we could see a major turning point for energy stocks.

Morgan Stanley analysts in Europe certainly seem to think so. In a note to their investors last week they hail the move above $60 a barrel which has "occurred despite a recovery in the USD, which tends to be a negative for commodity prices". Slowly but surely we're seeing these prices seep through into profits - "despite the rebound in the sector, Energy doesn't look particularly stretched, especially in comparison to many other cyclical sectors. Energy is still the second worst performing sector year-to-date in Europe, and despite rebounding to the highest relative level since May, the sector still looks depressed relative to the move in the oil price (see chart below). Through what has been a strong earnings season for the sector so far, earnings revisions for Energy are now at their highest level since 2008, when oil was at $146."

Exhibit 8: Energy has rebounded to the highest relative levels since May, but in that time Brent has risen over $7

Source: Datastream, Morgan Stanley Research

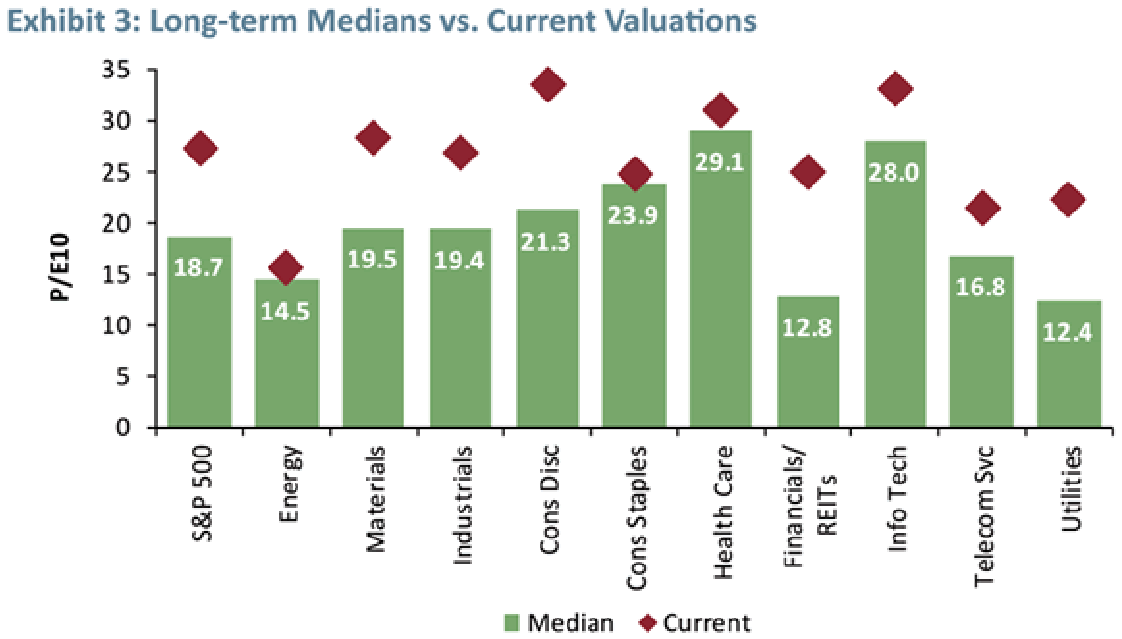
Contents

Headline Numbers

Why is the S&P so expensive when compared both to other markets as well as its historical record? That's the question posed by a paper from US fund management firm GMO in a paper entitled "FAANG SCHMAANG: Don't Blame the Over-valuation of the S&P Solely on Information Technology" by Anna Chetoukhina and Rick Friedman.

The conventional explanation is to blame the big US tech giants - the FAANGs as they're called, the subject of another article later in this report. Facebook, Apple, Amazon, Netflix, and Alphabet (Google), the so-called "FAANG" stocks, are up 36% on average year to date through September. Many of these tech stocks trade at eye wateringly high valuations although the GMO authors accept that arguably some of these businesses "should trade at higher than historical P/S multiples given their cost structures are significantly more attractive (less traditional cost of goods/higher gross margins) than "old school" technology companies and the broader market". They also concede that some tech valuations don't look quite as stretched when using alternative measures such as Price/Gross Profits (P/GP), which considers revenues net of cost of goods sold.

The real problem for US stocks more generally is that although high valuations for tech stocks have a role to play, Chetoukhina and Friedman find that they do "not explain away the bulk of its [the S&P 500s] high absolute and relative valuation level". They observe that "pretty much every other sector, save Energy, is trading expensively relative to its median valuation since 1970 (see chart below). Yes, more of the S&P 500 is in the IT sector, which is relatively expensive versus other sectors historically and to itself today. But, with every other sector trading at P/E 10 levels far above long-term sector medians, it is easy to see why the overall market is overheated. The Financials, Utilities, and Consumer Discretionary sectors are particularly expensive relative to their own history, trading at premiums of 95%, 80%, and 58%, respectively."



As of 9/30/17
Source: GMO
Medians based on data back to January 1970.

But these stocks aren't just poor value using traditional metrics such as the PE ratio - a host of other metrics suggest that stocks are expensive, not least those using sales as a measure with the Price/Sales, or P/S ratio. They observe that on this basis "today's valuations look even more disturbing. The S&P 500's current 2.1x P/S ratio is 117% overvalued relative to its long-term median and trading just under the peak valuation it reached in March 2000". So investors should stop blaming the tech giants - most sectors are woefully overvalued on the US market.

Measure	Value as of 12th October, 2017	Value as of 10th November, 2017
UK Government 10 year bond rate	1.37%	1.33%
GDP Growth rate YoY	1.50%	1.50%
CPI Core rate	2.70%	2.70%
RPI Inflation rate	3.90%	3.90%
Interest rate	0.25%	0.50%
Interbank rate 3 month	0.36%	0.53%
Government debt to GDP ratio	89.30%	89.30%
Manufacturing PMI	55.9	56.3

Back to menu

Bank CDS options

The market for insuring against bank bond defaults had yet another subdued month, with most rates edging slightly lower. In our table UBS edged into pole position (ahead of HSBC Bank) in terms of pricing for 1 year CDS swaps, only a tad above the rate quoted for UK government bonds - in fact UBS 5 year swaps are now priced at 18.82 basis points versus 23.73 for the UK government. Rates for Lloyds bank also continued to fall sharply and are now at just 7.28 basis points for 1 year swaps. Rates for SocGen also fell sharply into the single figures whilst German giant Deutsche continued its steady recovery.

Bank	One Year	Five Year	Monthly Change (5yr)	Annual Change (5yr)	Credit Rating (Fitch)
Banco Santander	18.59	45.4	-3.7	-47	A -
Barclays	21.49	43.77	-5.85	-51	A
BNP Parabis	12.47	30.23	-12	-58	A
Citigroup	18.17	46.09	-0.42	-44	A
Commerzbank	17.71	52.01	-27	-58	A+
Credit Suisse	19.15	59.72	-13.18	-58	A
Deutsche Bank	28.48	79.53	-12	-65	A+
Goldman Sachs	21.46	58.83	-1.9	-38	A
HSBC	6.72	18.90	-22	-70	AA-
Investec*	n/a	181	n/a	n/a	BBB
JP Morgan	18.12	43.36	-0.88	-33.8	A+
Lloyds Banking Group	7.28	41.17	-3	-47	A
Morgan Stanley	19.36	54.47	-1.32	-41	A
Natixis	14.72	34.86	-6	-50	A
Nomura	12.31	42.81	-0.56	-49	A-
Rabobank	8.71	22.82	-14	-63	AA-
RBC*	n/a	56	n/a	n/a	AA
RBS	13.36	51.35	-1	-57	A
Soc Gen	8.35	30.98	-14	-55	A
UBS	5.65	18.82	-16	-70	A

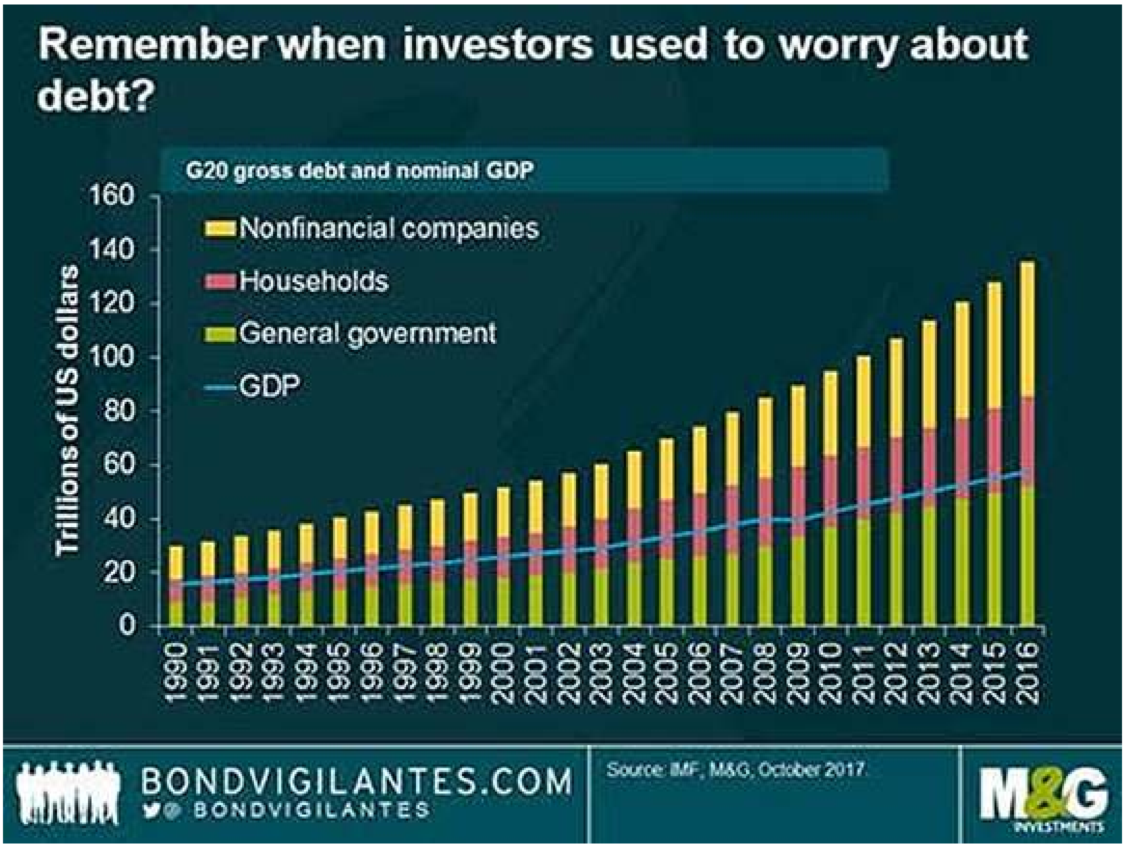
Source: www.meteoram.com 10th November 2017
*Model implied CDS rate is the 5 year model CDS from the Bloomberg Default Risk function

Back to menu

Government Bonds

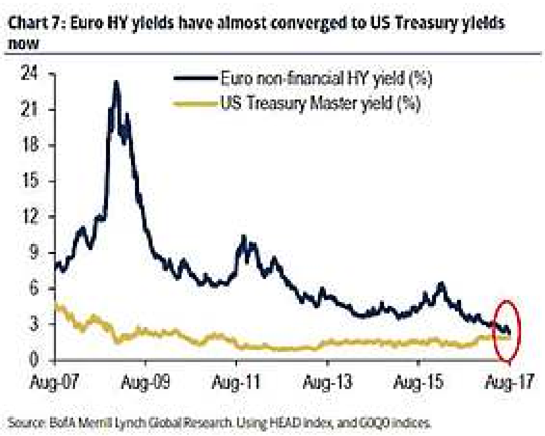
Another month and yet another set of charts which should act as a warning for bond investors.

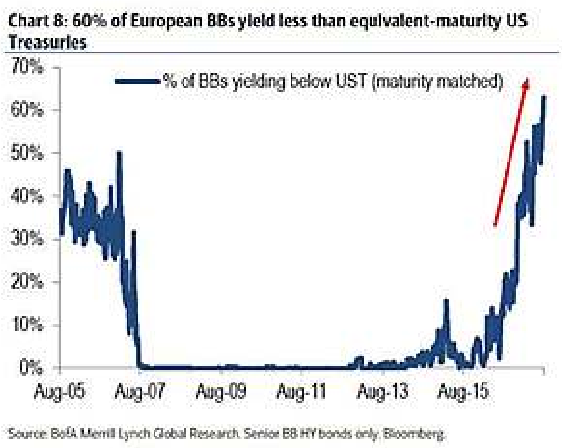
First off, we have a chart from Anthony Doyle, part of the successful bond investing team at M&G. He points to the first chart below, which reminds us that aggregate global debt levels are moving inexorably higher. According to Doyle in the G20 advanced economies, the debt-to-GDP ratio has grown steadily over the past decade and now stands at over "260% of GDP or 135 trillion US dollars. $135,000,000,000,000.00. It's a big number, and whilst it is true that this debt represents an asset on another balance sheet, it is undeniable that governments, corporates, and households have never lived beyond their means by so much. It is for this reason that advanced economy interest rates are so low, and are unlikely to return back to levels observed before the 2008 financial crisis. For investors, that means you are going to have to take more risk to generate positive real returns".



Some sense of just how this scramble for yield is slowly warping prices for assets - and the risk return trade off - can be seen here in Europe. The second warning chart comes from US fund manager Mark McKinney at Kopernik Global Investors.

McKinney highlights European corporate bonds as one area of concern. He says that in Europe, "where individual countries don't have the ability to "manage" their own currency and most countries, other than Germany, have MUCH worse debt profiles than the U.S., their weakest public companies (i.e., junk rated) now have debt trading at lower yields than the U.S. federal debt yields. Over 60% of European BB rated high yield bonds yield less than similar-maturity USTs. Of all the things that don't make sense today in terms of valuations, this might top the list."





UK Government Bonds 10-year Rate 1.33%

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

CDS Rates for Sovereign Debt

Country	Five Year
France	17.58
Germany	9.69
Japan	33.12
United Kingdom	23.29
Ireland	28.69
Italy	118
Portugal	124
Spain	64

Eurozone peripheral bond yields

Country	October 2017	November 2017	Spread over 10 year
Spain 10 year	1.62%	1.56%	116
Italy 10 year	2.11%	1.83%	143
Greece 10 year	5.57%	5.17%	477

	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

Volatility

Volatility- Does low volatility mean we're heading for a crash?

The hackneyed trope from old westerns of a group of cowboys sitting around a fire while unseen enemies approach their encampment comes when one character emits the deathless phrase 'it's quite out there... too quiet'.

So, it is with the measures of volatility in stock markets. To date in 2017 only on seven trading days we have seen swings of more than 1% in the S&P 500. To put that into perspective, in the average year since 1950 there has been 49 days where the S&P 500 has moved more than 1%. This gives a good illustration of how unusual current conditions are. In fact, we have to go back to the 1960s to see similar becalmed periods. Even just in terms of the most recent pullback of over 5% - a mini-correction – it is now well over a year since this last occurred. One more impressive statistical observation: there are only three periods before when the S&P 500 has seen a longer streak of trading days without falling 5% going back to 1950 - twice in the mid-nineties and once in the mid-60s.

The markets equivalent of the 'too quiet' warning came from Hugh Hendry, the founder of the hedge fund Eclectica Asset Management who announced via an open letter that he was closing his fund in September in part due to the "strange environment" at present where "in the absence of any recognisable asset bubble, risk assets should continue to trend positively. This is simply not a good time to offer a risk diversifying portfolio," Hendry added.

Theories abound as to why stock movements are so calm, but, as ever in markets, there is no definite explanation for precisely why what's happening is happening. Some point the finger at Quantitative Easing (QE), with central bank action dampening market volatility - why worry, if Draghi and Yellen have got your back? Yet other still suggest that investors, scarred by the recent enough experience of the 2008 financial crisis, are still under-risked and wary of the next crash. That's certainly the view also of Sean Corrigan, director of Cantillon Consulting who suggests that the so-called search for yield is driving forward what has been called the most unloved bull market in history.

"My take is that the sheer weight of money swilling around searching for an outlet has conditioned everyone to think dips do not trigger bigger liquidations, but only offer fleeting opportunities for the disappointed sceptics to get back in."

It is a trend that will likely only increase in the coming weeks as November progresses and the book-closing (or ex-dividend date) draws closer. "This is something that might only get worse over the next few weeks as everyone tries to get loaded up on winners and get back to benchmark."

But while, as Corrigan suggests, these supposedly benign conditions "can't last forever", it can be very painful for any investor who, as with Hendry, believes they can run counter to the tide or predict when the tide might turn. But in his final words to investors before signing off, Hendry did offer one more piece of volatility-related advice - look at fixed income. He said because the market was currently underestimating global inflationary pressures - and the potential for more rate rises on the part of the Federal Reserve - it meant that the implied volatility on 10-year swaps currently represents a low-cost entry point. "Fixed income volatility really has only one direction it can go," he told his clients. "It has over shot to the downside." The same might eventually be said about equity market volatility. Are we heading for a crash? No one is quite sure, but it is fair to say that in many quarters the wagons are circled in preparation for more tempestuous times.

Measure	November Level	October Level	September Level	August Level
Vstoxx Volatility	14.61	12.43	13.96	21.41
VFTSE Volatility	10	9.69	10.71	15.97

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

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