**Q1** 2018

# QUARTERLY OUTLOOK

By #**SAXO**STRATS

SAXO GROUP

Q1 2018

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# HOW TO SPOT A BUBBLE

BY STEEN JAKOBSEN

Former Federal Reserve chair Alan Greenspan once stated that it's "very difficult to definitively identify a bubble until after the fact", but he was wrong. It is certainly possible to identify a bubble, even if it's not easy to precisely time its burst.

Former Federal Reserve chair Alan Greenspan has done more than anyone to inflate the world with empty promises of bailouts, easier monetary policy, and other such non-solutions, but one of his incorrect premises has proven slightly more persistent than the rest.

In his 2002 Jackson Hole speech entitled "Economic Volatility", Greenspan famously said that "we at the Fed considered a number of issues related to asset bubbles – that is, surges in prices of assets to unsustainable levels. As events evolved, we recognised that, despite our suspicions, it was very difficult to definitively identify a bubble until after the fact: that is, when its bursting confirmed its existence".

The central claim? That bubbles are very difficult to identify... but, no, Mr. Greenspan – they are not! In fact, Saxo Bank macro analyst (and resident astrophysicist) Anders Nysteen, has written a short introduction to the basic mathematics behind a bubble; we define it as the situation created when prices go super-exponential.

We do not claim to know when the current bubbles will burst. We can, however, identify where they exist and in our view there are a great many bubbles afoot right now. We see them in the bond market, in equities, in private equity, venture capital, real estate and certainly in cryptocurrencies.

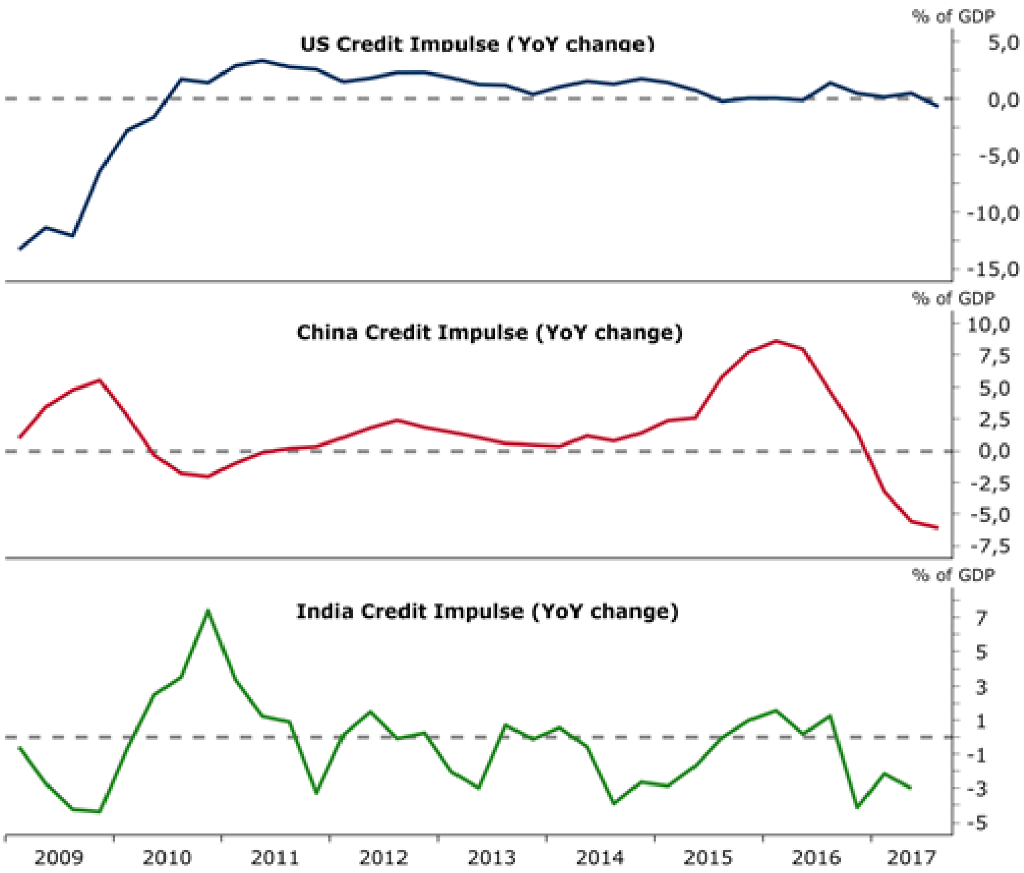
(Interestingly enough, we see no bubbles whatsoever in commodities, which have rarely enjoyed less love... but that's another story.)

The crypto bubble may be the most visible due to the high volatility and performance seen in 2017 but don't be fooled into believing that other assets are not in bubble territory as well. In fact, the length and extent of some of these bull markets may conceal just how far from fundamentals these assets have drifted.

Last month, for instance, Austria issued a 100-year bond with a coupon of only 2.1% that will lose close to half its value if interest rates rise 1% or more; this past week, good old Kodak made a 117% jump on the back of announcing that it will hold an initial coin offering to raise capital.

WE DO NOT CLAIM TO KNOW WHEN THE CURRENT BUBBLES WILL BURST. WE CAN, HOWEVER, IDENTIFY WHERE THEY EXIST

# **HOW TO**
# SPOT A BUBBLE




SOURCE: MACROBOND, SAXO BANK RESEARCH & STRATEGY

The chase for yield continues while central bank policymakers, supported by politicians' continued inability to pass real reforms, close their eyes and hope for the best. As we move into 2018's first quarter, the world is again full of hope and precious little reality. Expected EBITDA growth in the S&P 500 is 19.0% for 2018 (versus a record 17.5% set in the 1990s). The Fed's promise of three or more interest rate hikes is not upsetting the bond market where credit spreads continue to make new lows and where 10- and 30-year US bond yields rise at a glacial pace, but there are a few interesting things to point out on this front.

Central banks across the globe are now following the Fed's lead in normalising policy. Since the start of the year, both the European Central Bank and the Bank of Japan have become considerably more optimistic on the future – enough so that they are considering further tapering on top of their existing normalisation efforts.

(We refer here to the BoJ's de facto support slowdown in Q4 and the ECB's pre-announced reduction from €60 billion to €30bn/month in asset purchases.)

This is a new signal and one that is largely being ignored by leveraged assets like stock markets and private equity. EURUSD and USDJPY, however, have reacted to the news, taking JPY and EUR much higher than the market was willing to bet going into January

For me, this represents the first warning signal.

The second (which is really is the first, given our long-term focus on it) is the continued slowdown in the credit impulse, or the "rate of change of change" of credit in the market.

# **HOW TO**
# SPOT A BUBBLE

Our estimation is that global growth will slow down significantly in Q2-Q4 this year, leaving the door open for the Fed to unwind some of its tightening and catapulting a weaker USD lower as the world is once again disappointed by the pipe-dream of growth led by a US tax hand-out (which will only benefit the top 0.1%) plus a collapse of the so-called "synchronised growth" that exists to obscure the fact there have been zero reforms and no structural changes.

What there has been, of course, is a near-infinite amount of greed fed by low interest rates and the continual warping of data to depict a reality corresponding to Greenspan's bubble assumptions.

If bubbles can't be predicted, there is no use in looking for them... right?

Wrong!

It is time to talk about how bubbles form and not how they end. It is time, as we head into Q1'18, to talk about how low volatility does not, in and of itself, lead to higher volatility but higher inflation expectations, fiscal deficit expansions cross-asset correlations, and tightened monetary policy certainly does.

The four horsemen are stalking our current markets and when the dust clears, we suspect that 2018's story will be the one about how hope cannot replace reality forever.

2018'S STORY WILL BE THE ONE ABOUT HOW HOPE CANNOT REPLACE REALITY FOREVER


STEEN JAKOBSEN, CHIEF ECONOMIST & CIO

Steen Jakobsen first joined Saxo Bank in 2000 and has served as both Chief Economist and Chief Investment Officer since 2009. He focuses on delivering asset allocation strategies and analysis of the overall macroeconomic and political landscape as defined by fundamentals, market sentiment and technical developments in the charts.

# BUBBLES:
# A TECHNICAL APPROACH

BY ANDERS NYSTEEN

More than a simple metaphor, a bubble is a distinct mathematical form in which super-exponential growth causes a departure from fundamentals, and an eventual sharp correction. Of all concepts to keep front-of-mind into 2018, this may be one of the most crucial.

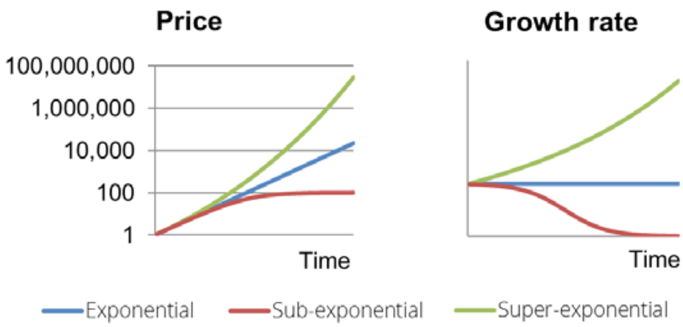
> THIS PHENOMENON IS RARELY OBSERVED IN NATURE, AND WHEN IT APPEARS, IT INDICATES A TEMPORARY AND UNSTABLE STATE.

Bubbles describe an extraordinary growth in the price of an asset or a population, followed by a sudden sharp decline when the bubble bursts. The build-up phase of a bubble may be characterised by super-exponential behavior where the growth rate continually increases. This phenomenon is rarely observed in nature, and when it appears, it indicates a temporary and unstable state. In the financial markets, one of the first examples of a bubble occurred during the Dutch tulip mania in the 17th century, where people rushed into the market after hearing about the large profits to be made, with the whole thing ending in a spectacular crash.

## UNNATURAL GROWTH

A mathematical approach to identifying bubbles starts with the laws describing natural growth. A population of living organisms usually increases exponentially at most, i.e. with a constant growth rate; one example is mitosis, or the division of organic cells, where we see a doubling of the number of cells at each time step. As the size of a population increases and access to space, food, etc. becomes limited, the growth rate will decrease. The extraordinary behavior of increasing growth rate only occurs when positive feedback mechanisms appear.

For the human population, such positive feedback inputs have come in the form of agricultural improvements and the developments in the healthcare industry, contributing to what some would call the "human population bubble". In the stock market, positive feedback is likely caused by traders who continuously enhance their over-optimistic expectations for the performance of an asset. This defines a mode of pure speculation in which traders are buying and selling without even considering the fundamental value of the asset.



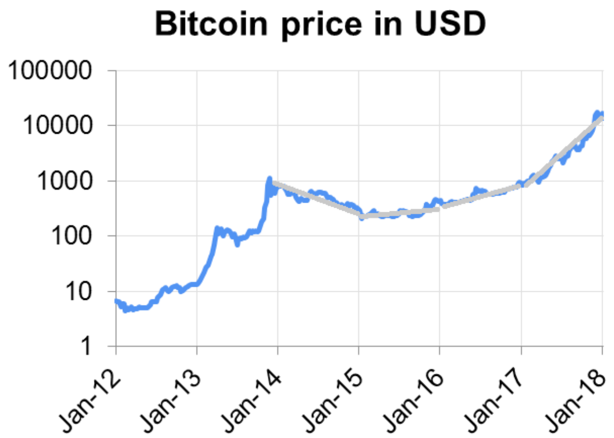

*Exponential growth is identified by a straight line in a log-plot, corresponding to a constant growth rate. Super-exponential growth has an increasing slope in a log-plot, indicating a bubble trend. Sub-exponential growth describes a slower growth with decreasing growth rate.*

# **BUBBLES:**
# A TECHNICAL APPROACH

## RAPID GROWTH IS NOT NECESSARILY A BUBBLE

The theory of super-exponential behavior may be used to identify potential bubbles in different markets. When considering a rapidly rising stock such as Amazon, the log-price corresponds to a straight line (see figure below). This indicates an exponential price rise which is fast, but not extraordinary – and thus no mathematical signs of a stock price bubble appear.

In contrast, the price of a Bitcoin has continued to grow even faster every year since 2015 in a super-exponential fashion, which is a clear indication of a Bitcoin bubble. In the presence of a bubble, the risk of a crash or at least a major correction is significantly increased. Theories have been proposed for when and how bubbles evolve and burst, but in the end nothing is certain until after the pop.


SOURCE: BLOOMBERG (THE GREY LINES INDICATE TRENDLINES).


ANDERS NYSTEEN, QUANTITATIVE ANALYST

Anders Nysteen joined Saxo Bank in 2016 in the Quantitative Strategies group, and his primary focus is on developing mathematical trading strategies and asset allocation models. Anders has a degree in Physics and Nanotechnology from the Technical University of Denmark and holds a Ph.D. in Quantum Photonics.

# HOUSING BUBBLES ARE POPPING UP EVERYWHERE … SO WHAT NOW?

BY CHRISTOPHER DEMBIK

From a macroeconomic perspective, property bubbles tend to be the most dangerous because they affect such wide portions of the population. The riskiest property markets right now can be found in Australia, London, Hong Kong, Sweden, and Norway.

We are in a world of bubbles fuelled by accommodative monetary policy and excess liquidity. A bubble is often hard to identify before it pops, but we can at least agree that among the most obvious characteristics is that prices go super-exponential, which is now happening in many markets around the world: cryptocurrencies, the negative yielding part of the bond market or tech stocks. However, from a macroeconomic viewpoint, the most dangerous bubbles are the ones seen in the past, especially in the property market.

Bubbles in financial assets are worrying, but they usually affect a smaller part of the population than do those in the property market. The most risky real estate markets we see are Australia, London, Hong Kong, Sweden, and Norway. All of these markets share these two features: home prices are decoupled from local incomes, and the real economy is experiencing distortions linked to monetary policy, such as a surge in lending and/or a boom in the construction sector.

| | Duration (Years) | % appreciation | Housing affordability | Signs of potential correction (based on BIS price index) |
|---|---|---|---|---|
| NORWAY property market | 25 | 490% | Average home prices were 7x median household income after tax in 2016 | Yes, decline in real estate price index since early 2017 |
| HONG KONG property market | 14 | 450% | Average home prices were 18.1x gross annual median household income in 2016 | No |
| LONDON & SUBURBS property market | 21 | 380% | Average home prices were 12x average annual household earnings in 2016 | No |
| SWEDEN property market | 12 | 123% | Average home prices were 8x median disposable annual household income in 2016 | No |
| AUSTRALIAN BIG CITIES property market | 14 | 108% | Average home prices were 6.6x gross annual median household income in 2016 | No |

*For purposes of comparison, data used to calculate appreciation of the property market are from BIS. Source: Saxo Bank Research & Strategy, Macrobond, Statistics Norway, Housing Affordability Survey.*

# MACRO: HOUSING BUBBLES ARE POPPING UP EVERYWHERE... SO WHAT NOW?

Despite the global financial crisis, real estate prices kept increasing in these five areas. Based on BIS data, since 2007, the boom ranged from 45% in London and its suburbs to more than 200% in Hong Kong. In the long term, however, the riskiest market is Norway. Over the past decades, the country's real estate prices have skyrocketed and the construction production index, another sign of market distortion, recently reached its highest level since 2000 (it stood at 135 in Q3'17).

Since 1992, Norway's real estate prices have increased by 490% (60% since 2007 as a direct result of the Norges Bank's low interest policy). Nonetheless, over a shorter period, boom prices have been higher in Hong Kong.

What makes Norway the riskiest housing bubble is the unique combination of a worrying level of household debt (the ratio of household debt to net disposable income is one of the highest in the OECD, reaching 220%) and one of the highest home ownership rates at about 85% (while it has been declining in other hot spots, like in London, or stabilising).

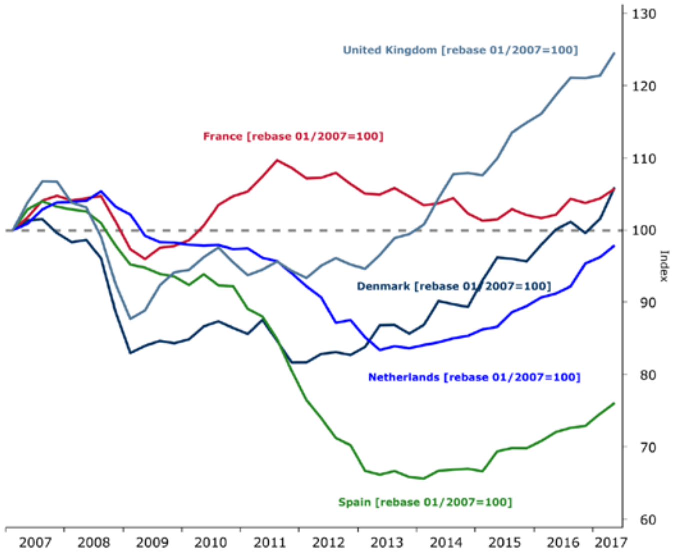
Once the bubble inevitably bursts, and there are already early signs of correction since prices of residential buildings have begun to decline since 2017, it will lead to a huge loss of wealth for homeowners who in many cases will not be able to afford their mortgage payments. According to Statistics Norway, more than 17% of households (mainly young couples with children) have total debt equal to more than three times their annual income. This financial black hole will have tremendous macrofinancial consequences.
The lack of inflation combined with high indebtedness and a high home ownership rate in such a highly leveraged economy means that the housing correction (or burst whenever it happens) will have ripple effects on the economy and will halt credit and growth.

The good news is that the systemic risk associated with these housing bubbles has remained limited. Housing bubbles mostly concern relatively small, open economies subject to inflows of cheap money resulting from accommodative monetary policy and, in some cases, such as Australia, speculative money from Chinese investors. However, these developments are interesting to watch because small open economies often lead bigger zones in terms of the housing market.

IN THE LONG TERM, THE RISKIEST MARKET IS NORWAY WHERE REAL ESTATE PRICES HAVE SKYROCKETED.

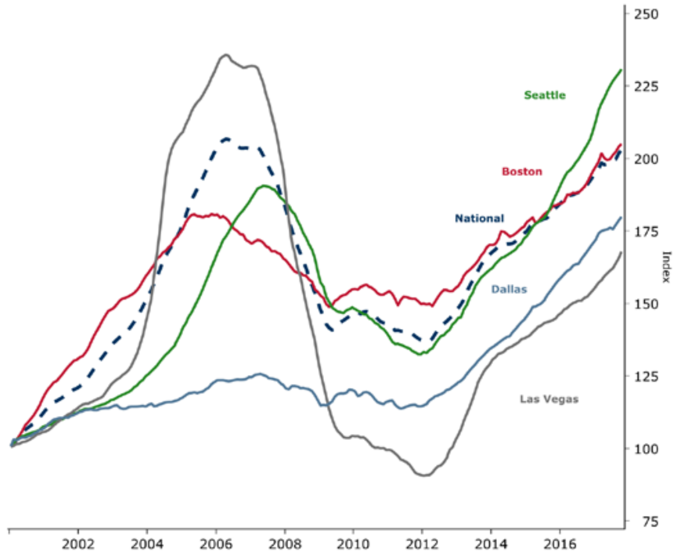
# **MACRO: HOUSING BUBBLES ARE POPPING UP EVERYWHERE**... SO WHAT NOW?

HOUSE PRICES AROUND EUROPE




SOURCE: MACROBOND, SAXO BANK RESEARCH & STRATEGY

CASE-SHILLER HOME PRICE INDEX
(NATIONAL AND BY CITY)




SOURCE: MACROBOND, SAXO BANK RESEARCH & STRATEGY

Until now, the situation has been rather healthy in most of the major developed countries, but we are starting to see valuation issues popping up here and there. Nonetheless, the situation is nothing like what was seen before 2007.

- *In the main European countries, the risk of a property bubble is quite limited. The GFC led to an explosion of the housing bubble, and only since 2014 have prices returned to their pre-crisis levels under the impulse of stronger economic growth. However, there are some exceptions, like Spain, where prices are 20% lower than their 2007 level.*

- *In the US, the housing market has fully recovered. The Case-Shiller national index has almost reached its pre-crisis level. New boom cities have appeared to replace Miami and Las Vegas where housing prices remain below their 2007 levels. In Boston, prices are about 20% higher than their previous peak; Seattle around 40% higher and Dallas 50% higher. However, contrary to 2007, household indebtedness is more sustainable since the ratio of household debt to net disposable income was at 112% in 2015 versus 142% in 2017 (source: OECD, last data available).*

# MACRO: HOUSING BUBBLES ARE POPPING UP EVERYWHERE... SO WHAT NOW?

Among major economies, investor worries have mostly focused on China where property prices have inflated massively due to excess liquidity. The bright side is that the government's first measures to better regulate the real estate market seem to be paying off as for the first time since spring 2015, new home sales contracted in October 2017. However, it is too early to draw a conclusion; we have to wait for further Chinese data to know if the correction is going to happen in 2018. It will strongly depend on the economic targets to be unveiled by the Chinese government at the annual parliamentary meeting in March 2018.


CHRISTOPHER DEMBIK, HEAD OF MACRO ANALYSIS

Christopher Dembik joined Saxo Bank in 2014 and has been the Head of Macro Analysis since 2016. He focuses on delivering analysis of monetary policies and macroeconomic developments globally as defined by fundamentals, market sentiment and technical analysis.

# THE MOST IMPORTANT YEAR SINCE 2008

BY PETER GARNRY

Equities might be at record highs, with sentiment overextended on nearly all fronts, but this does not necessarily point to a bubble. It does, however, mean that a correction is likely. In our view, investors should be watching price action for signs of super-exponential growth, as well as central bank policy and of course inflation.

This year began with the most buoyant environment since 2006 before the first signs of US housing weakness materialised. Economic surprise indices across many major economies are at their highest levels since their inception in 2000. Estimates for EBITDA growth among S&P 500 companies, meanwhile, are higher than any realised annual EBITDA growth rate in this index since 1991. The MSCI World AC Index has been up for 15 straight months, something that has never happened since its inception in 1988.

There are some indications of a price bubble in equities, but nothing like the periods leading up to the 1987 and dot-com crashes. Equities are not expensive relative to everything else, but in absolute terms, things look choppy. Cryptocurrencies seems to be where the real exuberance is. Real estate prices in real terms are also stratospheric in many countries. Bears are caving in to the strong equity market with a scant few left waving the warning sign.

Who's right, the bears or the bulls?

## RIGHT ON BRAZIL, WRONG ON ENERGY

In our Q4 outlook, we highlighted Brazilian equities as overextended driven by the weakness in the USD and markets chasing the rebound story led by China. We said that investors should be underweight Brazil as the valuation was on par with US equities and the political situation was still fragile. It turned out that Brazilian equities underperformed MSCI World by 7.5 percentage points and MSCI Emerging Markets by 8.5% in USD terms.

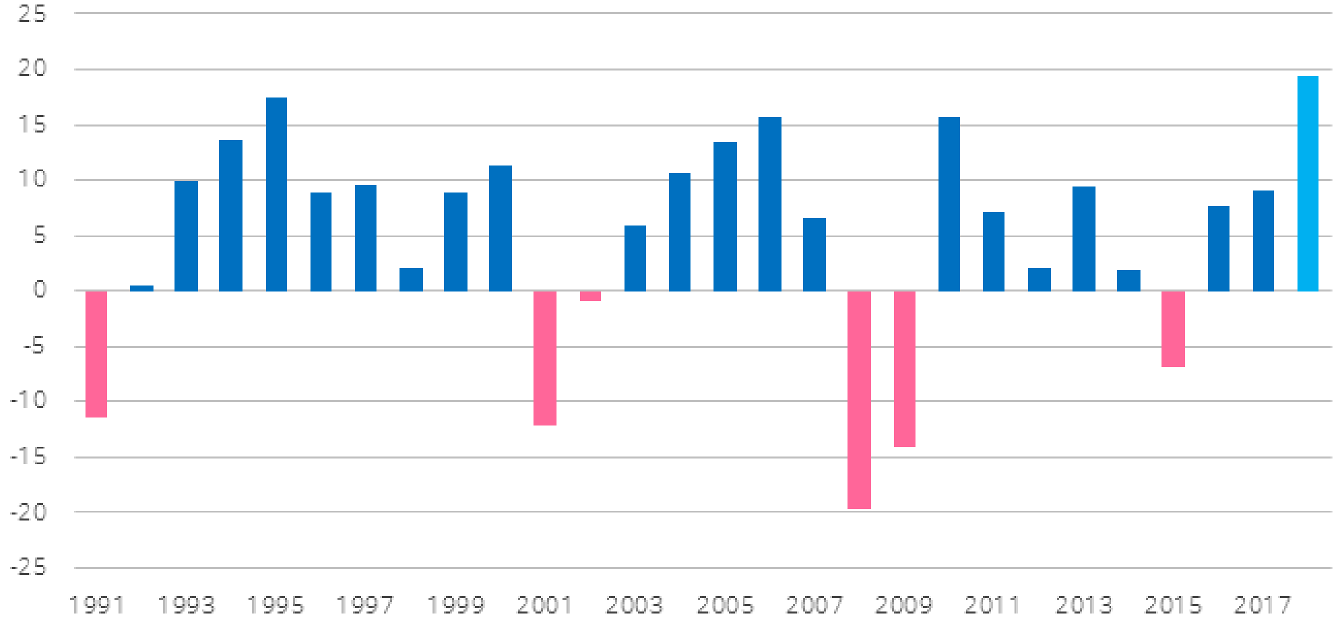
We also reiterated our negative view on the energy sector driven by our perception of upside potential in the oil price and weak balance sheets. Brent crude rose by 18% as supply tightness and strong economic sentiment pushed the price higher. Fortunately, the energy sector's valuation was already discounting significant crude upside so the MSCI World Energy Index gained 6.8% in Q4 against 5.8% in the MSCI World Index, translating into a small outperformance.

## INVESTORS ARE CHASING AN ILLUSION

For Q1 we acknowledge the strong price momentum and upbeat expectations together with what will likely become a strong earnings season reflecting past events. This is causing us to believe that equities can push higher in the very short term, but that in the second half of Q1 macro data will begin to disappoint against expectations causing an equity correction above 7%, something we have not seen since Brexit.
The last big equity correction was in late 2015 extending into early 2016 when worries peaked over China causing global stocks to lose close to 20% of their value.

# **EQUITIES: THE MOST IMPORTANT YEAR** SINCE 2008

S&P 500
(EBITDA growth in % including estimates for FY 2018)




SOURCE: BLOOMBERG AND SAXO BANK

Investors are expecting almost 20% growth in EBITDA in the S&P 500 this year… something, by the way, that has not been realised since 1991. Hopes are understandably high given the end we saw to 2017, but the low implied volatility should not cause investors to doze off – quite the opposite, in fact. A policy mistake in China or the US is still possible and inflation, whether it under- or overshoots, will be the most important trigger in global markets for 2018.

## WHAT DOES PRICE BEHAVIOUR SAY ABOUT AN EQUITY BUBBLE?

Plotting the daily prices of the MSCI World Index on a log scale, acceleration can be seen in the last part of the time series indicating some super-exponential growth which is the mathematical definition of a bubble.

This should be a big cause for short-term concern and potentially the main factor that could spark a correction larger than 7%.

The MSCI World AC Index has not risen for 15 months straight since its 1988 inception. The previous record was 11 months ending in February 2004. Not even during the crazy dot-com days did the equity market experience this high positive autocorrelation, something that obviously bolsters the view that the dot-com bubble was highly concentrated in a few sectors and not broad-based.

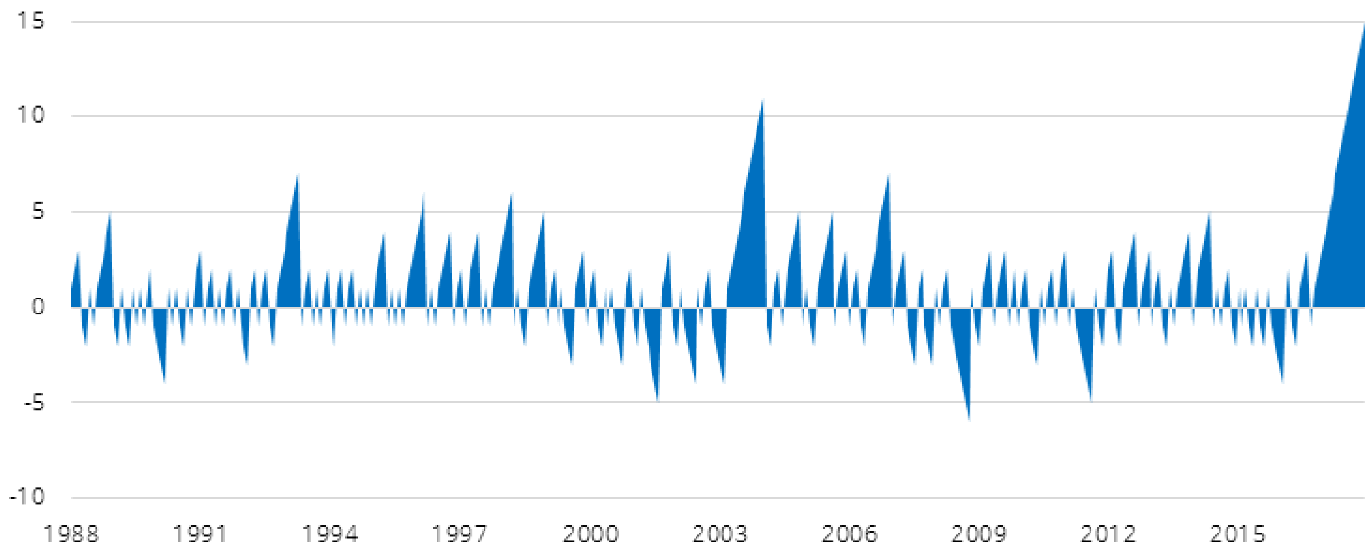
The price behaviour seen over the past 15 months is unprecedented and broad-based across both developed and emerging markets.

> GLOBAL EQUITIES ARE GETTING MORE EXPENSIVE, BUT NOT DANGEROUSLY EXPENSIVE.

# EQUITIES: THE MOST IMPORTANT YEAR SINCE 2008

MSCI ACWI INDEX

Number of straight months with gains / losses

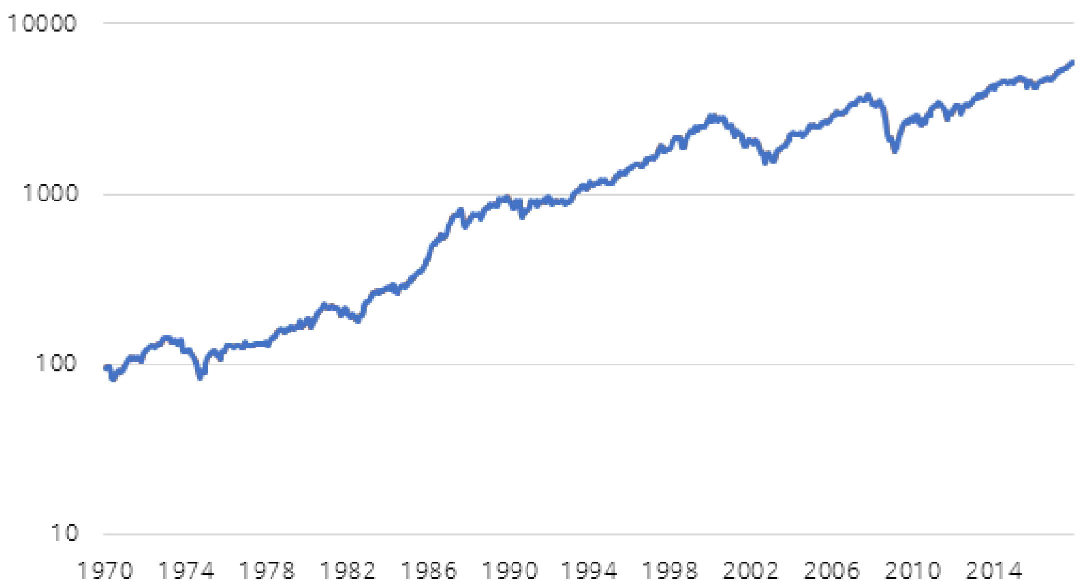



SOURCE: BLOOMBERG AND SAXO BANK

While daily prices in the MSCI World indicate super-exponential growth over the past months, the conclusion changes dramatically if the frequency domain is reduced to monthly observations and the period is extended to start in 1970.

In that domain, the latest run-up in global equities does not exhibit super-exponential growth. However, there is clear evidence of such a pattern in the three years leading up to the seismic 1987 crash; super-exponential growth can also be (vaguely) observed in the last phase of the dot-com bubble.

MSCI DAILY TOTAL RETURN USD INDEX




SOURCE: BLOOMBERG AND SAXO BANK

# **EQUITIES: THE MOST IMPORTANT YEAR** SINCE 2008

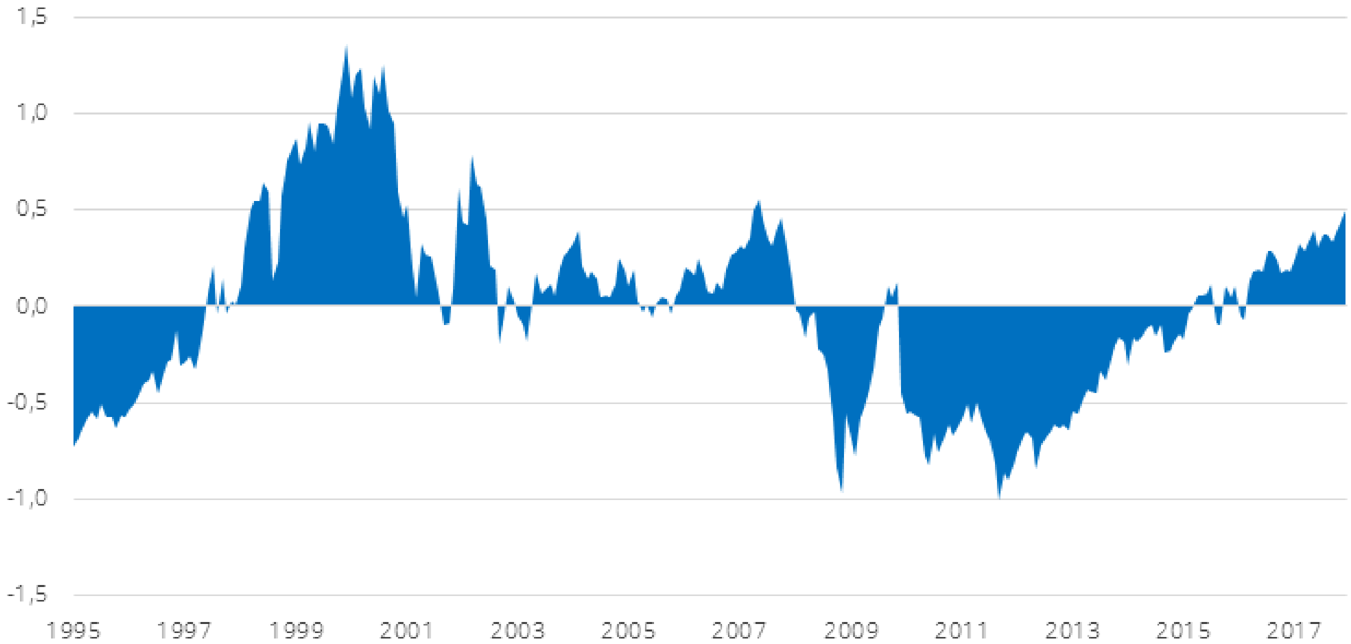
The sector that has seen the most outperformance since the financial crisis is the technology sector but even here the price behaviour since 2009 does not indicate a bubble. There are many periods of super-exponential growth in the NASDAQ Composite Index for the period 1980-2000, but 2009-2018 is a straight line on a log scale but with slightly higher slope, indicating a higher but constant growth rate. This is not, strictly speaking, the definition of a bubble.

## EQUITIES ARE GETTING EXPENSIVE

Based on a broad basket of valuation metrics such as P/E, P/S, Div. Yld., EV/EBITDA, FCF Yld., P/B, P/CF, EV/Book, and EV/Sales, the MSCI World Index is 0.5 standard deviations above the average based on data from the past 22 years. At their peak during the dot-com bubble, these nine metrics were on average at 1.5 standard deviations above; at the bottom in September 2011, the average valuation was minus one standard deviation.
Global equities are getting more expensive, but not dangerously expensive. A recession remains the biggest risk for a large correction in equities, not valuations.

### MSCI WORLD INDEX

Average Z-score across 9 valuation metrics




SOURCE: BLOOMBERG AND SAXO BANK

When you forecast the future you have to consider the many factors influencing said forecast. For example, current valuations, the forecast horizon, economic outlook and policy response. If we start with the long-term forecast over the next five years, then equity returns will be higher than any other asset classes, especially fixed income, with emerging market shares the best equity segment.

# **EQUITIES: THE MOST IMPORTANT YEAR** SINCE 2008

## WHY ARE WE SO CERTAIN ABOUT THIS?

Real estate is extremely overstretched in real terms, and is only held up by historically low interest rates and ongoing urbanisation (even in the developed world), but lower income growth will cap real estate returns from here through lower mark-to-market gains.

Fixed income offers little return with the 10-year yield in the 20 largest government bond markets at around 1.2% The yield increases to 3.2% in global high-yield but this is probably as good as it will get because investors will likely not see any further yield compression in that segment. In other words, the bar is set very low for equity investors.

The only long-term scenario where equities will not deliver the best returns is if the world tailspins into deflation should the world's mountain of debt tumble.

If we look one year forward, then the picture gets muddy because it basically comes down to whether the economy is about to enter a recession or not. Current macro data indicate a low probability of recession, so 2018 is likely not to be an ugly year for equities unless conditions change dramatically.

So why are we cautious or even outright negative on equities in Q1? Sentiment is so overextended that investors can only be disappointed. Many indicators are elevated, often to an unprecedented degree, which increases the likelihood of a larger setback should macro data disappoint, which they are likely to do since macro is very mean-reverting against expectations.

Q1 has all the ingredients for an interesting start and 2018 is likely the most important year since the financial crisis. Either everything continues to go up together with inflation and a well-managed process of rate normalisation, or else central banks make a policy mistake and the debt saturating the world economy returns with a vengeance.

THERE ARE SOME INDICATIONS OF A PRICE BUBBLE IN EQUITIES, BUT NOTHING LIKE THE PERIODS LEADING UP TO THE 1987 AND DOT-COM CRASHES.


### PETER GARNRY HEAD OF EQUITY STRATEGY

Peter Garnry joined Saxo Bank in 2010 and is the Head of Equity Strategy. In 2016 he became responsible for the Quantitative Strategies team, which focuses on how to apply computer models to financial markets.  He produces trading strategies and analyses of the equity markets as well as individual company stocks, applying advanced statistics and models to beat the market.

# FOREX: CURRENCIES EYE A BUBBLY 2018

BY JOHN J HARDY

With strong momentum from an extraordinary risk-taking year in 2017, this year should prove to be dynamic, with many subplots and increased volatility. We see a weaker US dollar into year-end, particularly against the yen, and perhaps only a real liquidity crisis could pave the way for a surge in the greenback.

> THE STORY OF THE YEAR, THE STRONG EURO, TOOK A BREATHER AS THE ECB PUT A HEAVY DOVISH HAND ON FORWARD GUIDANCE.

The final quarter of 2017 completed a spectacular year for risk-taking, as the US S&P 500 and MSCI global stock indices posted monthly gains for every single month of the year, with both also returning around 20% ex-dividends for the year in USD terms.

Strong emerging market assets saw the MSCI EM index returned a head-spinning 34.3% in USD terms as the US dollar was neutral to weak on the year on balance. Risk appetite and a weak US dollar are often two sides of the same coin, with the main question being which way the causality runs. Also feeding the momentum of flow into risky assets was a record pace of central bank asset purchases, led by the European Central Bank, Bank of Japan, and not least China ahead of its pivotal 19th Party Congress in October.

In FX, the action through the fourth quarter was increasingly muted as volatility across asset classes dropped. The story of the year, the strong euro, took a breather as the ECB put a heavy dovish hand on forward guidance.

Perhaps the most interesting FX development in Q4, outside of isolated-but-compelling stories such as the comeback in the South African rand, was in the "G10 small" currencies. The two Scandies and the three commodity dollars comprising the smalls started the quarter weakly but bottomed and then rose to varying degrees into early 2018. The chief drivers for these currencies were the backdrop of the much touted "global synchronised upswing", a recovery in commodity prices, and the idea that central bank policy convergence should prove supportive for most currencies versus not only the USD, but even a foot-dragging ECB as well.

That brings us to the first quarter and year ahead. After the remarkable head of steam built last year and a spectacular start to trading in the first days of 2018, many are wondering what can possibly stop the risk-on juggernaut, also known as the "bubble in everything".

Looking ahead, we see clear "known knowns" directly ahead that are quite likely to disrupt the one-way complacency of 2017 at some point in 2018, whether already in Q1 or not until the second half of the year. Add to these a number of readily identifiable "known unknowns", or wild cards for the year ahead, and 2018 should prove a far more volatile and dynamic year than the fearless, grinding risk-on surge and FX volatility swoon of late 2017.

# **FOREX: CURRENCIES** EYE A BUBBLY 2018

The most prominent known knowns that could challenge the narrative as 2018 gets under way are the following.

INFLATION – inflation was extremely benign in Q4 and helped drive the risk-on mood, even as central banks everywhere showed signs of shifting policy into neutral. But a number of leading inflation indicators (for example, US ISM prices paid and the New York Federal Reserve's underlying inflation gauge) point to the risk of a strong pickup in inflation already in the first half of 2018. The question will be the degree to which inflation picks up to which central banks feel they are suddenly behind the curve. If the inflation pickup is mild in Q1 and the market merely slightly upgrades the anticipated path for many central banks, we might be able to extend the 2017 action for a quarter or more into the new year, with a strong pickup in commodity and EM currencies and a weak USD.

But if inflation accelerates sharply in the US, where the evidence of this risk in leading inflation indicators is most clear, and the long end of the US yield curve begins lifting more aggressively while Fed expectations do so as well (pricing in four-plus rate hikes this year), this should boost volatility for global assets generally. Such a rise may not particularly support the US dollar, but it could prove less supportive of risk appetite and currencies that are sensitive to risk, and the Japanese yen would more likely prove a strong beneficiary of this environment.

US FISCAL PICTURE – the US budget deficit widened in 2017 for a second consecutive year and should widen aggressively in 2018 as a result of the funding shortfalls from President Donald Trump's rushed tax reform policy. With a possible deficit of $1 trillion for 2018 looming, who will step in to finance when global FX reserves are not building as they have in the past? This is the most glaring negative for the US dollar for the year ahead.

BOJ TAPERING/SHIFT IN POLICY – the BoJ has been singing the tune of "no change to policy", but has been walking the walk of a bank that is tapering. The taper is so far likely merely a function of the yield-curve-control policy requiring fewer purchases to keep Japanese government bond yields where they are wanted. But if global yields are on the rise, the BoJ will likely have to blink, especially given the underlying strength of the Japanese economy. In particular, a shift in the 10-year yield "cap" portion of the YCC policy could see the market aggressively front-running a policy shift by the BoJ, just as the very strong euro of 2017 was driven by the ponderous shift in the ECB's guidance as quantitative easing in the European Union is eventually seen as coming to an end.

In addition to the known knowns above, there are a number of known unknowns.

CHINA-US TRADE SHOWDOWN – there has been much talk that the wily US president will turn against China in 2018 as a nod to his base and as he is not satisfied with the lack of significant progress on trade relationships thus far, given his "America first" slogan. What form and what severity this will take are unknown, but one wonders if the Bloomberg story (later declared fake news by Chinese authorities) citing officials claiming a loss of Chinese appetite for US treasuries on valuation and trade concerns was a shot across the bow from China's side in anticipation of Trump opening trade hostilities this year. Any US-China policy showdown would see massive risk-off fallout and would accelerate China's de-dollarisation efforts and potentially shake the foundations of global finance to their core, given extreme complacency and inability of this market to absorb bad news.

DEGREE OF GROWTH DECELERATION – a number of activity surveys reached record or near-record highs in Q4, from Eurozone PMIs to the US ISM manufacturing survey and a significant surge in China activity surveys as well. But our credit impulse measures are collapsing, and the laws of mean-reversion – particularly in the ability of data to continue to surprise to the upside – suggest that momentum will falter in Q1, even if it is too soon to start sounding the warning bell. The US is likely to hit air pockets first, and this could boost the weak USD/central bank policy convergence story.

GEOPOLITICS – 2017 saw the market sailing against the geopolitical headwinds with nary a concern. Predicting world events is not our metier, but the sheer abundance and potential impact of possible geopolitical flare-ups demand a cautious stance in 2018. A brief list includes US trade policy (see above), the West's relations with Russia, the future of Syria and the Iran/Saudi divide, North Korea, and Venezuela. It's a full menu and a significant blow-up in any of these could rapidly derail markets in a number of directions (high oil for some, generalised risk-off for others, or both).

STERLING/BREXIT – a significant potential source of volatility, though possibly one that is more likely in Q2, would be a breakdown in the Brexit negotiations that forces a new UK election and for the UK political parties to stake out what they want from what is likely to prove a "hard Brexit if at all", and that goes for Labour's Jeremy Corbyn in particular. While it is uncertain what a second referendum might bring, it might trigger a strong rally in sterling on hopes that the UK returns to the old status quo, unlocking concerns about the future of the UK financial sector and eventually reinvigorating business investment and strong capital flows back into the UK.

## A DYNAMIC YEAR AHEAD

2018 should prove a dynamic year with many subplots. We are highly uncertain as to when our themes for the year will swoop down and move the markets, but many of them should be tested in Q1. Brief bouts of USD strength may arrive on strong US inflation surprises that see the Fed's rate hike path significantly upgraded early in 2018. But we see a weaker USD into year-end, particularly against the Japanese yen, but also versus the euro and sterling.

EM and riskier currencies could enjoy some further upside on the global growth upswing story, but gathering headwinds will arrive if volatility picks up notably, which is one of our base assumptions. The only perceived path to a surge of strength in the greenback is if some sort of real liquidity crisis develops at some point – the perennial fat-tail risk. That risk may only materialise if we see the much-discussed global market melt-up risk unfolding first.

LOOKING AHEAD, WE SEE CLEAR 'KNOWN KNOWNS' DIRECTLY AHEAD THAT ARE QUITE LIKELY TO DISRUPT THE ONE-WAY COMPLACENCY OF 2017 AT SOME POINT IN 2018.


JOHN HARDY, HEAD OF FX STRATEGY

John Hardy joined Saxo Bank in 2002 and has been Head of FX Strategy since October 2007. He focuses on delivering strategies and analyses in the currency market as defined by fundamentals, changes in macroeconomic themes, and technical developments.

# COMMODITIES: INFLATION IN FOCUS
## AS GOLD BULLS GATHER STRENGTH

BY OLE HANSEN

Gold has the potential for real long-term strength on the back of geopolitical uncertainty and an elevated risk of correction in risky assets.

Commodities in general are benefiting from an increased focus on inflation as the current expansion cycle moves toward its late stage, where price pressures tend to build. Commodity index investors have pushed the Bloomberg Commodity index to an 18-month high, while the energy-heavier S&P GSCI has reached a 27-month high.

With crude oil representing 39% of the exposure in the S&P GSCI and 15% in the BCOM, any demand from index investors has been benefitting crude more than most other commodities.

The global oil market is currently moving towards a healthier balance between supply and demand. This was especially helped by the December 2016 decision by Opec and Russia to curb production in order to clear the glut that had developed following rapid non-Opec production growth between 2011 and 2014. Strong demand driven by the current synchronised global growth and several supply disruptions during the final quarter helped lift the price well above levels previously seen as possible during this phase of the recovery.

In our view, however, the job is not yet done and the November's decision to extend the original output cut agreement to the end of 2018 with a review in June was the clearest sign of the challenge that still lies ahead.

With Opec and Russia having promised to keep production capped, the three key questions that are likely to determine the price of oil in 2018 are the production response to higher prices (not least from US shale oil producers), the potential from new supply disruptions, and the continued strength of the global economy.

Another year of robust global demand growth in the region of 1.5 million barrels/day (the December average of estimates from Opec, the International Energy Agency, and the Energy Information Administration) is expected to be met with a rise in non-Opec supply of 1.4 million b/d.

The shortfall of just 0.1 million b/d, if realised, risks slowing or even reversing the rebalancing process.

> BARRING ANY GEOPOLITICAL UPSETS, THE RECORD OIL LONG HELD BY FUNDS AT THE BEGINNING OF 2018 COULD POSE A POTENTIAL CHALLENGE TO THE CURRENT BULLISH MOMENTUM

# COMMODITIES: INFLATION IN FOCUS
## AS GOLD BULLS GATHER STRENGTH

What can go wrong? Barring any geopolitical upsets, the record 1 billion barrel oil long held by funds at the beginning of 2018 could pose a potential challenge to the current bullish momentum. A seasonal slowdown in demand from motorists and refineries should see storage levels rise during the first quarter. We also have some concerns about the Chinese economy in 2018 that ultimately could lead to lower-than-expected demand growth.

Given the impact on the price of oil of a few hundred thousand barrels per day in changed supply or demand, we see the risk – especially during the coming months – skewed to lower prices, with Brent crude oil at risk of returning to $60/b.

By year-end we see Brent crude at $60/b with WTI three dollars lower at $57/b.

Renewed geopolitical risks (of which we have had plenty during the second half of 2017) are likely to be the key source of support and one which could upset our call for lower prices during the first quarter of 2018 – particularly President Trump's demand that the Iran nuclear deal shall be rewritten within six months with extra demands added.

After almost hitting our year-end target of $1,325/oz last year we maintain a bullish outlook for gold into these early stages of 2018. The dovish December 13 Federal Open Market Committee rate hike and the US tax reform agreement both helped signal another low point for gold with inflation once again emerging as a key driver for gold support.

> BY YEAR-END WE SEE BRENT CRUDE AT $60/ BARREL.

Following the strong rally, a correction and subsequent rejection to the downside is probably what the market now needs to create the foundation required to push the price higher to and potentially beyond key resistance at $1,375/oz.

Our bullish sentiment derives from the belief that inflation will receive increased attention as it moves higher, while geopolitical risks remain elevated with the market disliking the uncertainty created by the unpredictability of the US president. Investors are likely to continue to seek tail-end protection against the increased risk of a correction in other asset classes, particularly stocks and bonds but potentially also cryptocurrencies.

Our trade idea for Q1 is to be long gold against WTI crude oil. Gold's recent underperformance relative to oil has seen the ratio slump to 20.7, a 30-month low. We favour using WTI over Brent given the lower cost (backwardation) of holding a short position in WTI.

OLE HANSEN, HEAD OF COMMODITY STRATEGY

Ole Hansen joined Saxo Bank in 2008 and has been Head of Commodity Strategy since 2010. He focuses on delivering strategies and analyses of the global commodity markets defined by fundamentals, market sentiment and technical developments.

# BONDS: DEEPWATER HORIZON

BY SIMON FASDAL

Bond markets are unlikely to post a repeat of 2017's low-volatility, low-yield calm, but neither is a full-scale blowout necessarily on the horizon. The key factors to watch are inflation and whether central banks can pull off a smooth normalisation process.

2017 saw some of the smoothest bond markets I can remember, with volatility resting at record lows throughout the year. A flow of continually sideways macro data created the perfect condition for bond yields to stay at low levels for the core segments, and for more risky bond classes to see nice returns on the back of continued spread compression.

This was achieved, by the way, via epic returns in global equity markets, meaning that old-school asset class correlation rules were flouted for more or less the entire year. One interesting point is that the German 10-year core yield traded in a range of 44 basis points, remaining sub-0.60 for the entire year.
Talk about calm seas... or calm before the storm.

## THE DISTANCE BETWEEN THE EQUITY RALLY AND YIELD LEVELS MIGHT BE A TRIGGER:


Late in the year, however, there began to emerge signs that the present eerie calm could soon be disrupted. The global economy picked up in 2017 and both Europe and Japan surprised to the upside. Another surprise was the surge in crude oil prices, which sees both benchmark variants now trading firmly above $60/barrel, crushing fears of an imminent drop to the record low 20s. We also observe that more and more countries are experiencing labour bottlenecks in selected industries as the search for workers heats up.

# **BONDS:**
# DEEPWATER HORIZON

## STANDING ON THE EM 'ONE-WAY TRAIL' WOULD BE VERY UNPLEASANT WERE WE TO SEE A SUDDEN SPIKE IN US YIELDS

Despite underlying technological developments working against inflation, it seems that we are in the preliminary phase of a near-normal price function in the global economy, or for quantitative easing fans, the third stage of QE's palliative effects, including a return to inflation.

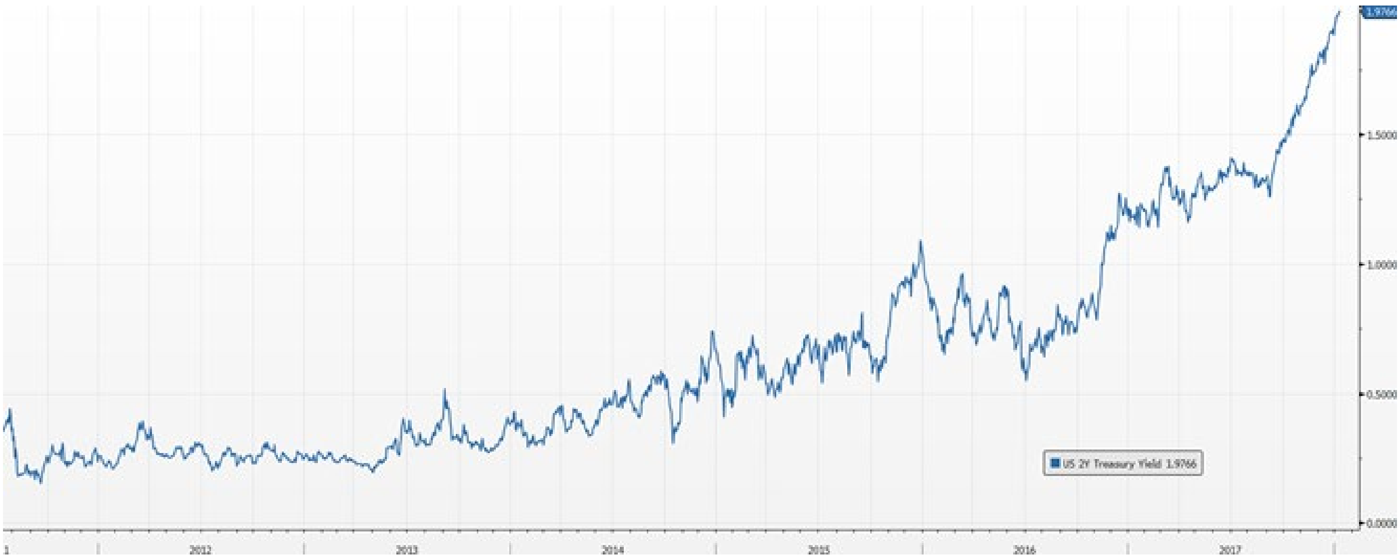
It is therefore worrisome that we are entering the new year with a combination of the following factors:

- Overall positive developments in major economies.
- An increasing risk of inflation emerging.
- Central banks not knowing how to exit QE in a smooth manner.

And the most worrying factor:

- A US yield curve where two- (1.97%) and five-year bond yields (2.33%) have already made a liftoff, but where longer maturities seem to be stuck. It is as if the pipe has been clogged, and pressure is now building up from below… hence the "deep water" metaphor!

*As the market focuses on 10-year yields, two-year maturities have taken off and are at a nine-year high!*

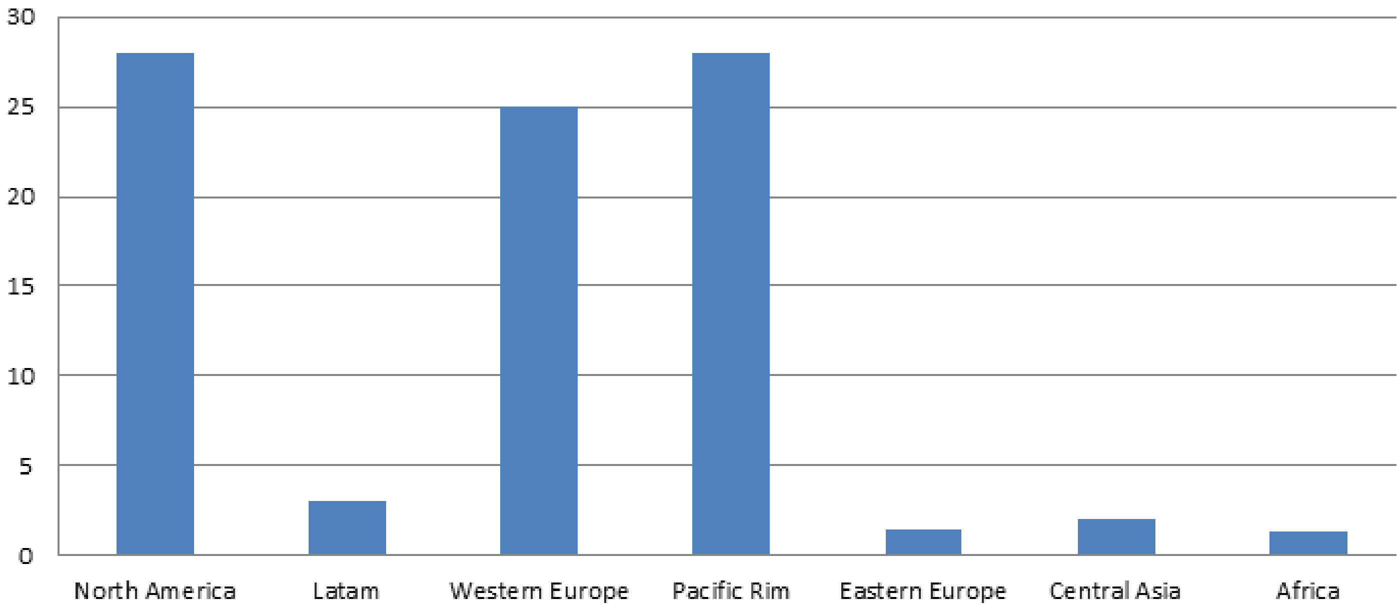



As for whether we will see a similarly tragic blowout in bond markets as we did in 2010's Deepwater Horizon oil rig disaster it's still too early to tell, but when we speak of bubbles we should note that bond markets will have a very hard time coping with a sudden spike in US and global 10-year core yields.

# BONDS:
# DEEPWATER HORIZON

The problem is the size of the bond market compared to the marketplace overall. For example, EM bond markets have tripled in size since 2007, and Japan and China now have the same total outstanding debt as the US. It's not that this is not justified given the size of these economies, but the size of the total global marketplace is alarming.

## OUTSTANDING DEBT USD




Though a sudden rise in US Treasury yields could bring trouble to the bond market, this is not where I see the biggest danger. In my view, US yields will merely become an instrument of disaster, as we saw when the then-Fed chairman Ben Bernanke signalled in 2013 that the bank would gradually reduce QE and the ensuing "Taper Tantrum" sent the 10-year yield above 3%. My fear is rather that just as the EM bond space and the DM corporate bond market have seen significant growth, the primary marketplace for these same bonds has diminished due to regulatory downscaling from banks.

I will agree that the evolution of electronic trading and all-to-all trading has brought new liquidity to world markets, but in many ways this liquidity is less committed… after all, when buy-side trades with buy-side, it certainly creates liquidity, but this liquidity lacks urgency.

It is the sort of trading, ultimately, that occurs when such participants feel like trading – and that's a problem when everyone feels like selling!

# **BONDS:** DEEPWATER HORIZON

A full-blown Deepwater Horizon scenario in bond markets would look something like this:

- Inflation- or central bank-spurred events trigger a selloff in 10-year US Treasuries.
- It is suddenly obvious to everyone that significant pressure has built up further down the yield curve, and this creates a blowout in the longer maturities.
- A huge rotation away from longer maturities starts with major fund managers reducing maturity and year-long carry trades. Sizeable spillover is seen in European government bond markets, where the periphery spikes even further due to the magnification premium towards the German benchmark.
- The same magnification premium will increase investor demand for yield in corporate bonds and particularly in emerging markets, leading to huge portfolio reductions.
- At the same time, fear of reduced liquidity brings yet more fund sellers out in the less mature bond markets.
- European credit, having long been safeguarded by ECB QE, is now on its own. This results in a violent upward shift in the credit curve as the artificial downward pressure is blown away.
- EM FX weakens as the imminent fear of a market crash leads to selloffs in local currencies as well. This initiates a second round of selling in EM assets.
- Several market freezes see a number of funds and banks report severe losses. Single-country emerging markets upgrade their finance systems to emergency level with local central banks attempting to fight the selloff and crisis.

That, of course, is a fictitious view of a worst-case, bubble-bursting scenario – hardly a base case! But take a look at the 10-year Treasury yield, where we are at 2.57%, or just 43 bps short of 3%... Q1 is a time to be cautious.

THE PROBLEM IS THE SIZE OF THE BOND MARKET COMPARED TO THE MARKETPLACE OVERALL

SIMON FASDAL, HEAD OF FIXED INCOME TRADING

Simon Fasdal joined Saxo Bank in 2011 and is Head of the Fixed Income Trading desk. He focuses on delivering strategies and analyses of the bond markets defined by fundamentals, market sentiment and technical developments. He is also responsible for making Saxo Bank the first online provider of corporate and government bond trading on Saxo Bank's award-winning platform – SaxoTraderGo.

# WILL THE CRYPTOCURRENCY MANIA CONTINUE?

BY JACOB POUNCEY

Cryptocurrencies smashed forecasts and made headlines throughout 2017, but though the crypto market continues to grow by leaps and bounds, 2018 is likely to be a more complex year for this maturing space.

> THE KEY DYNAMIC IS THAT THE CRYPTO MARKET IS GROWING BY HUNDREDS OF THOUSANDS OF USERS PER WEEK

2018 will be a make-or-break year for the burgeoning crypto asset market. The optimists are looking for the market cap to top $1 trillion while pessimists foresee increased regulation and even the outright banning of cryptocurrencies as monetary authorities decide that the space is out of control and represents a direct threat to their monopoly of money.

If the market continues its momentum from the previous quarter, $1 trillion is not that far-fetched – especially considering that the entire market cap quadrupled in the last quarter to $600 billion and currently sits at $700 bn.

## TOTAL MARKET CAPITALISATION


SOURCE: COINMARKETCAP.COM

# **WILL THE CRYPTOCURRENCY** MANIA CONTINUE?

## FUNDAMENTALS

The key dynamic is that the crypto market is growing by hundreds of thousands of users per week, with the market adding over 100,000 users daily.

Google Trends indicates massive search volume in developing economies, while developed economies host the largest exchanges. This is because in the current state of the market, developing economies facing hyperinflationary regimes get the most utility out of cryptocurrencies while developed economies have better infrastructure to support the burgeoning market at scale (electricity and IT infrastructure).
Additionally, there is a tremendous amount of capital seeking exposure to this asset class to a degree that smells more of greed than rationality.

## MARKET SPECULATION

Crypto assets are behaving similar to the dot-com stocks of the late 1990s. Companies such as Kodak (KODK) and the Long Blockchain Company (LBCC) – formerly known as the Long Island Iced Tea company – have seen their stock prices soar after announcing blockchain pivots, just as did companies that added "dot.com" to their names during the internet bubble.

At the peak of the dot-com era, over 100 companies had changed their name. In a similar fashion, we expect more companies to announce blockchain pivots in Q1'18 before this speculative phase is over.
Currently, there are over 120 crypto-focused hedge funds in the crypto investing space. The US Securities and Exchange Commission, meanwhile,notes an increase in the number of blockchain and cryptocurrency ETF applications with over a dozen ETFs currently pending approval.
Additionally, the SEC has received applications for leveraged and inverse ETFs for the volatile crypto space. These vehicles will offer easier access to hungry retail and institutional investors allowing more capital to flow into the space and for the speculation to continue. Some of these ETFs will launch this quarter with a majority going live this year, pending approval.

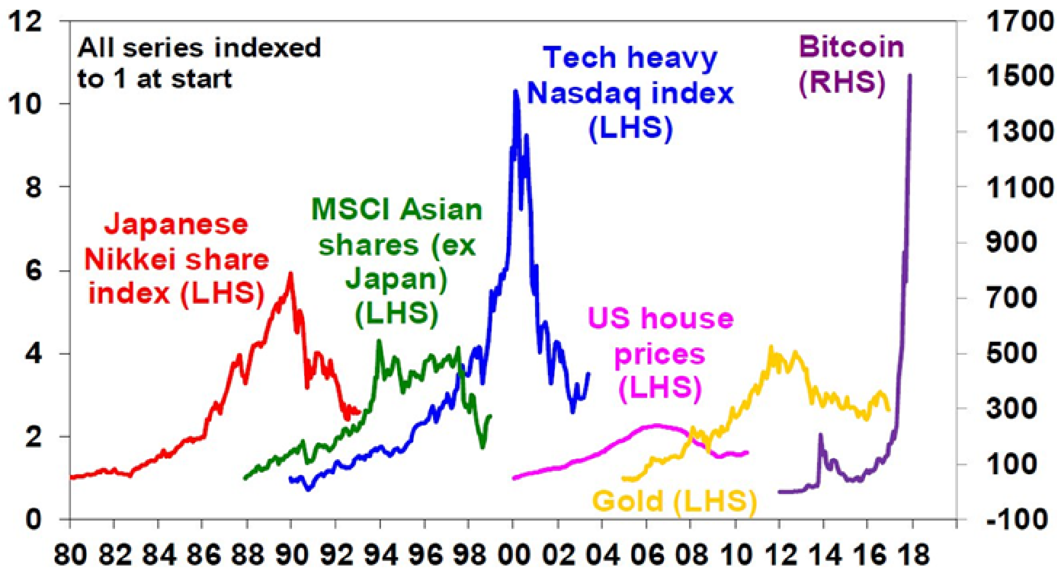
There is, however, one key interesting aspect to cryptos' return profile: it has been uncorrelated to the financial markets.

| | BTC | ETH | XRP | BCH | LTC | S&P 500 | VIX | GLD |
|---|---|---|---|---|---|---|---|---|
| BTC | 1 | 0.31 | 0.06 | 0.01 | 0.46 | 0.12 | -0.23 | -0.15 |
| ETH | 0.31 | 1 | 0.37 | 0.34 | 0.69 | -0.06 | 0.02 | 0.16 |
| XRP | 0.06 | 0.37 | 1 | -0.03 | 0.26 | 0.02 | -0.01 | 0.19 |
| BCH | 0.01 | 0.34 | -0.03 | 1 | 0.22 | -0.18 | 0 | -0.01 |
| LTC | 0.46 | 0.69 | 0.26 | 0.22 | 1 | 0.06 | -0.04 | 0.06 |
| S&P 500 | 0.12 | -0.06 | 0.02 | -0.18 | 0.06 | 1 | -0.59 | -0.06 |
| VIX | -0.23 | 0.02 | -0.01 | 0 | -0.04 | -0.59 | 1 | -0.01 |
| GLD | -0.15 | 0.16 | 0.19 | -0.01 | 0.06 | -0.06 | -0.01 | 1 |

SOURCE: SIFR DATA 90-DAY DAILY RETURNS FROM 14 OCT - 12 JAN

# **WILL THE CRYPTOCURRENCY** MANIA CONTINUE?

MAJOR GLOBAL ASSET BUBBLES OVER THE LAST FOUR DECADES




SOURCE: THOMSON REUTERS, BLOOMBERG, AMP CAPITAL

## MARKET TRENDS

One major trend in 2018 could be the continuation of Bitcoin's demise. Bitcoin's market cap as a percentage of the entire crypto market is at an all-time low; this reflects the growth of other crypto assets, many of which were created last year.
These projects have no products whatsoever, only whitepapers and technology roadmaps. They range from gambling and gaming to healthcare and insurance. Q1'18 will see more projects hitting the market, each touting itself as the next crypto revolution in its particular sector.

This, again, will only drive further speculation in this nascent market.

Bitcoin's market cap dominance could see prove resurgent through Q1'18 or we could see a continued inflation of the other crypto assets that winds up leaving Bitcoin behind. In the long term, the entire crypto market will see a general consolidation in the number of projects as most cryptocurrencies will fail.

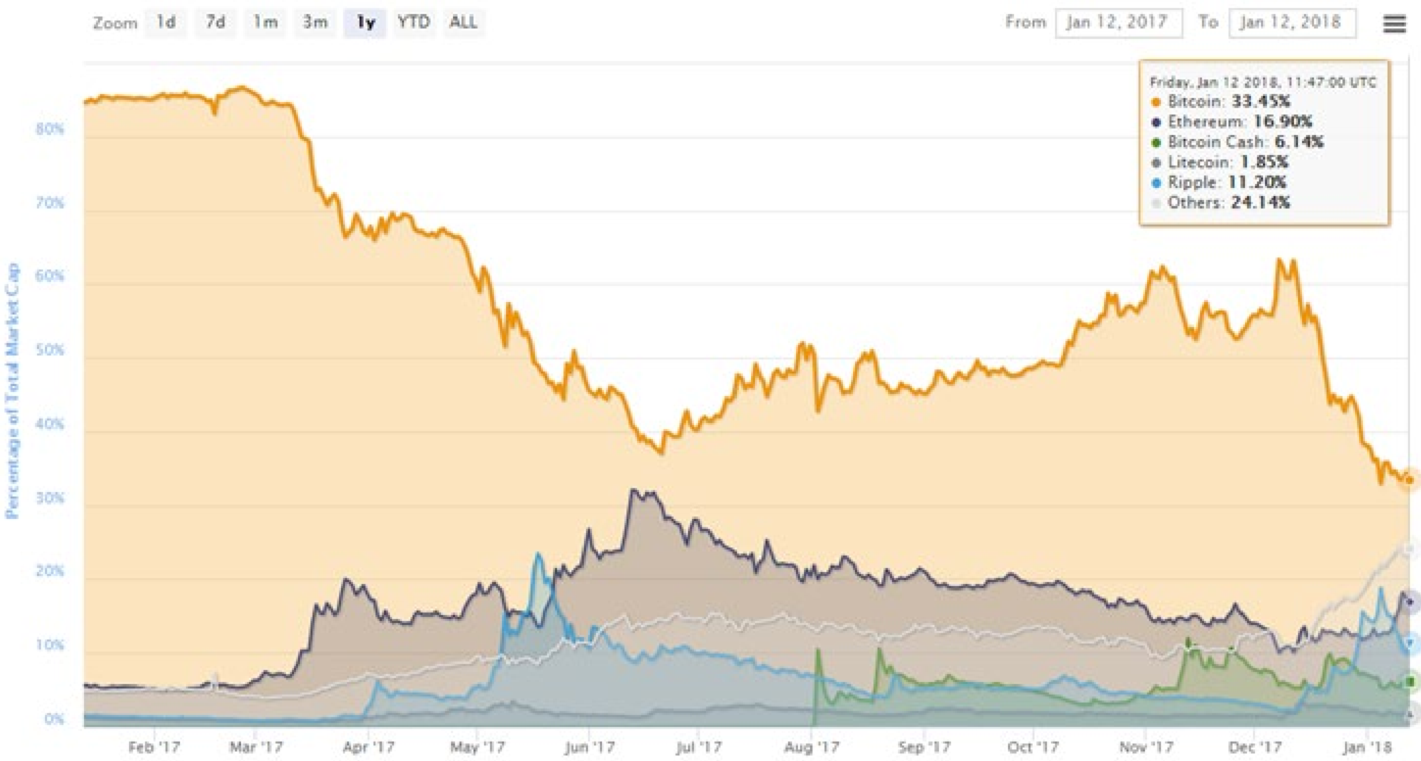
If the crypto space is to see a new leader; Ethereum seems to be one of the crypto assets with real-world utility that goes beyond its cryptocurrency function. Ethereum had a bright future when it was around the $300 level and now, after a 4x increase, the future still looks promising for the young network over the long term (24 months).

Ethereum is processing over 1.25 million transactions/day and tens of billions of dollars in volume. The number of applications built on top of the network is ever-increasing. I these projects begin to fail, however, Ethereum's utility will decrease and the price will retrace accordingly.

The risk of investing in crypto assets is high and investors should diversify their risk accordingly. If the market continues its trend from the previous quarter, the market will witness a birth of a new asset class. If the market crashes, regulators will lash out at those involved and hinder the growth of the technology with burdensome red tape that could set the industry back years.

# WILL THE CRYPTOCURRENCY MANIA CONTINUE?

PERCENTAGE OF TOTAL MARKET CAPITALISATION (DOMINANCE)




SOURCE: COINMARKETCAP.COM

ETHEREUM SEEMS TO BE ONE OF THE CRYPTO ASSETS WITH REAL-WORLD UTILITY THAT GOES BEYOND ITS CRYPTOCURRENCY FUNCTION


## JACOB POUNCEY, CRYPTO ANALYST


Jacob Pouncey first joined Saxo in 2017 as their go-to crypto guy. He has followed the cryptocurrency and blockchain space since 2013. Jacob focuses on delivering in-depth crypto market analysis. He has a deep understanding of the technology and fundamentals that drive the Crypto Asset space.
Jacob tends to focus on medium and long-term indicators for market analysis.

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