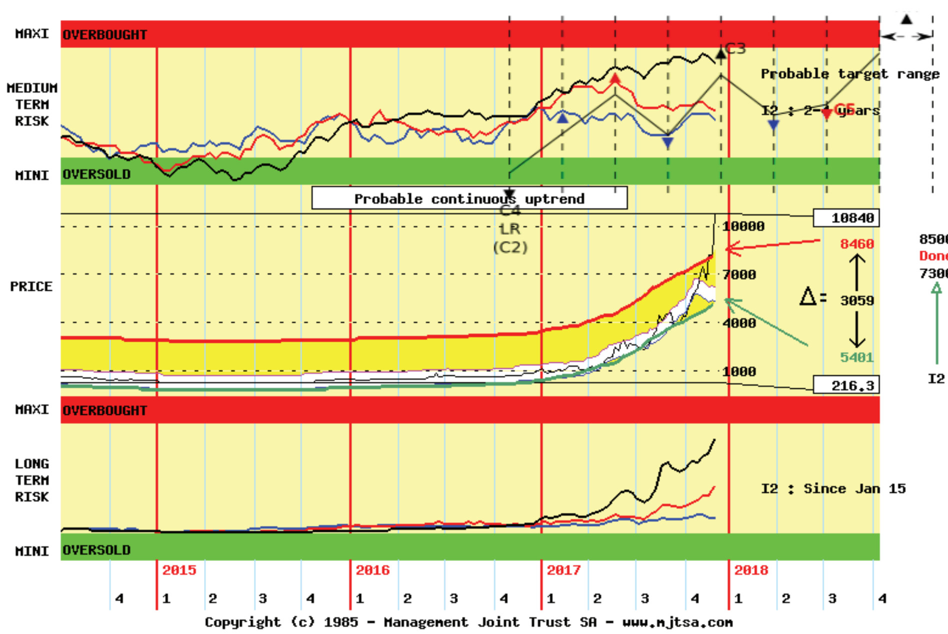
45 / Splicing the markets – The « Cyclicity » of Bitcoin

Last time we covered Bitcoins in the Capital Observer was late May (the 26th). USD 2'754 had been reached on the 25th, and we expected that "It might be days/weeks rather than months before the next large intermediate correction takes its toll." Our estimate for the correction was "circa U$ 450 to 730 or possibly 25% to 35% lower". We were pretty much "ball park". Bitcoin topped out at USD 3'000 on June 11th and corrected down to USD 1'835 on July 16th. It then swarmed up again during August, came just short of USD 5'000 early September, corrected down to below USD 3'000 on the 15th September and then "gradually" reaccelerated up during late September. As we write (on 2nd December AM), Bitcoin prices are just above USD 11'000.

So yes, in retrospect, we did "sort of" catch the June/July 30% sell-off, yet, in the wider perspective of things, didn't truly understand the outstanding nature of the beast. Indeed, call it a Bubble, or a Game Changer, Bitcoin's parabolic acceleration comes only second (for now) to the Tulip Mania in terms of speed and strength. The Tulip Mania took place in February 1637, almost 400 years ago.
As part of our review, we will first perform the analysis again, and consider Bitcoin on our Weekly graph (as of last Friday, the 1st December, the close was slightly above USD 10'800).

BTC/USD (BitStamp) - Weekly graph or the perspective over the next 2 to 4 quarters



Our long term oscillators (lower rectangle) are trending upwards, yet are hard to pinpoint to any specific timing. Our medium term oscillators (upper rectangle) may indicate a further top towards year-end and a subsequent correction down during Q1 2018 before prices resume up again. Our I2 extended Impulsive 2 targets up (right-hand scale) have been overtaken. Our historical volatility measure "Delta" (as of Friday 1st December at 3'059; middle rectangle, right-hand side) would imply a possible downside correction potential between USD 1'530 (0.5 times "Delta") and USD 2'447 (0.8 times "Delta").

Seeking further confirmations

The conclusions above are probably sound, yet, given the volatility of the beast, they may be already outdated. We had to go on the hunt for further confirmations. Our goal was to identify assets that are showing strong correlation to Bitcoinwqa, analyse their cyclicity and draw conclusions for the evolution and timing of Bitcoin prices. Yet, with Bitcoin in parabolic ascension, if we used "price" as the correlation input, we ran the risk of focusing only on other parabolas, which, in term, would probably turn out as "false cousins" (e.g. the SMH or TAN ETFs, which have also seen strong performance this year). In order to avoid this trap, we ran the correlation work on a de-trended version of Bitcoin prices using a simplification of our "Blue" Daily long term oscillator (Blue line, bottom rectangle on our Daily graphs). We then compared this time series to the same time series calculated on circa 100 other cross asset instruments (equity indexes, bond trackers, currencies, sector trackers, commodity futures) and ranked them in terms of their 12 months correlation to Bitcoin (daily data). We believe the results are quite compelling and intuitively logical, please find below a table with Bitcoin's top 5 most correlated assets, and top 5 most inversely correlated assets:

Bitcoin's Top 5 most, and most inversely, correlated assets (on a de-trended basis)

Rank	Most correlated assets	Correlation coefficient
1	XLU - Utilities Select Sector SPDR Fund	62.1%
2	FTSE 100 Index	60.1%
3	XLP - Consumer Staples Select Sector SPDR Fund	55.4%
4	QQQ - PowerShares Nasdaq 100 Trust	55.3%
5	TRAVEL & LEISURE - Dow Jones STOXX Europe	44.0%

Rank	Most inversely correlated assets	Correlation coefficient
1	ENERGY - Dow Jones STOXX Europe	-45.0%
2	GBP/USD (US Pound vs Dollar)	-43.9%
3	BANKS - Dow Jones STOXX Europe	-43.2%
4	Goldman Sachs Industrial Metals Index	-42.1%
5	USD/ZAR (US Dollar vs SA Rand)	-38.7%

Source: MJT statistics, based off 12 months Daily data

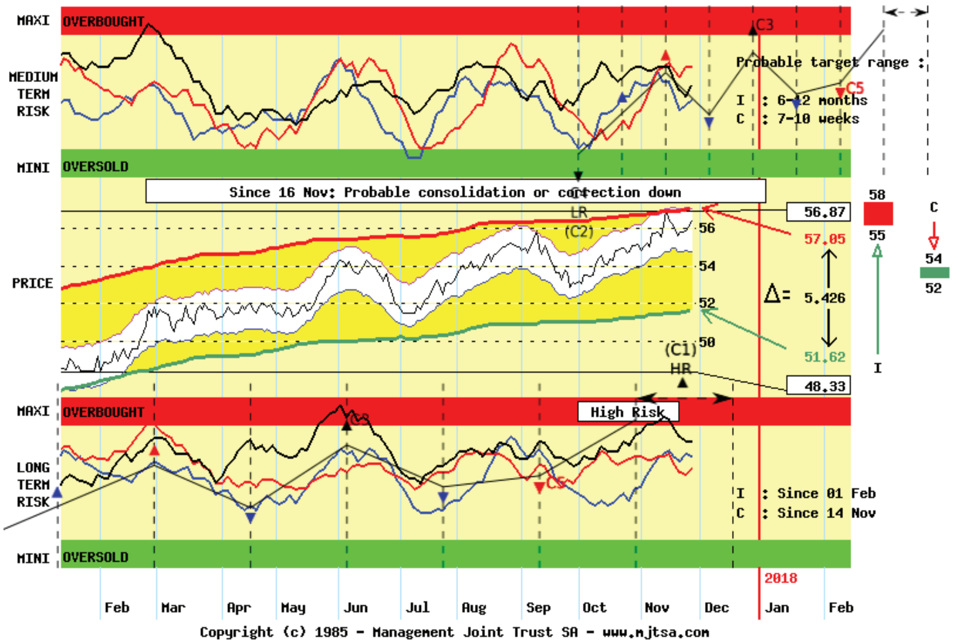
From the results in the first table above (most correlated), it appears that Bitcoin's de-trended profile (i.e. its cyclicity) currently seems to follow typical Growth/Defensives equity dynamics as opposed to Value and Commodity ones. Indeed, while US Utilities and US Staples are typical Defensive equity sectors, the Nasdaq 100 is the current expression of Big Growth profile. The FTSE 100 is-66% inversely correlated to GBP/USD (de-trended), when the Pound is often considered the more cyclical of the 5 major currencies. As for the European Travel & Leisure sector, it is-50% (inversely) correlated to Brent Oil. (also a rather cyclical asset)

From the second table above, we can note that Bitcoin is most inversely correlated (on a de-trended basis) with typical Value sectors such as European Energy or Banks, commodity influenced currency pairs (GBP/USD, USD/ZAR) and Industrial Metals.

Finally, please note that the above does not imply that Bitcoin is a risk-off asset. Indeed, its de-trended correlation is very weak to Gold (-5%), to 30 year Treasury Bond Futures (-8%) or the Bund (0%). As mentioned above, it is much closer to Growth and Defensive equity profiles. **In a way, Bitcoin is another typical anti-reflationary trade, and it is interesting to note that US Utilities, the Nasdaq 100 and Bitcoin, all corrected down in June and September, the only two months this year when US Value stocks corrected up vs US Growth stocks (see our graph on page 33 of this document).**

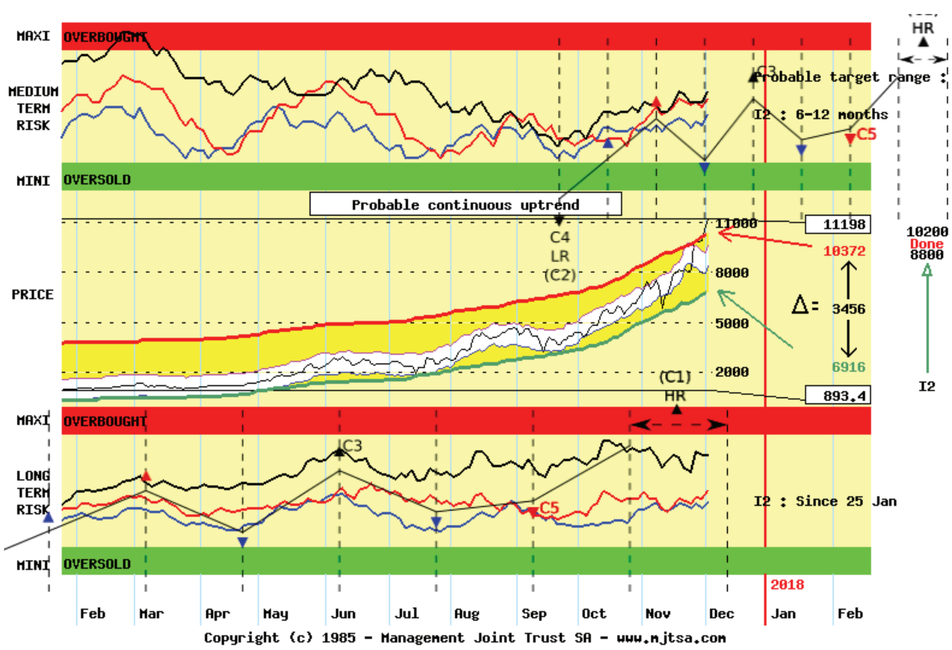
We will now move on to the graphs to corroborate and complete this statistical analysis.

XLU - Utilities Select sector SPDR Fund
Daily graph or the perspective over the next 2 to 3 months



As detailed above, we will look at the US Utilities sector as a proxy for the cyclicity of Bitcoins (this is somewhat ironic, especially given that Bitcoin mining now consumes as much electricity than Ireland). Indeed, its de-trended price action, which is close to our **"Blue" long term oscillator (lower rectangle) is showing a correlation coefficient of 62.1% to the one of Bitcoin below**. These "Blue lines" follow a similar rhythm and, more generally, the models we would apply to both oscillator sequences, are the same. On our long term oscillators series (lower rectangle), we've reached a High Risk position, while on our medium term oscillators (upper rectangle), **the current move may extend up into late December. Following that, we would expect a correction to the downside during January and into mid February, before price resumes up towards the Spring.** Note: we came to similar timing conclusions on the Weekly graph of the Nasdaq100 vs the S&p500 (the Nasdaq 100 has a 55.3% de-trended correlation coefficient to Bitcoin). This analysis can be found on page 21 of this issue of The Capital Observer.

BTC/USD (BitStamp)
Daily graph or the perspective over the next 2 to 3 months



Given the similarities of the oscillator positions between this Bitcoin graph and the one on US Utilities above, we would tend to draw similar conclusions for Bitcoin in terms of Timing. For some comfort, you may compare the price actions year to date, and will notice how on both oscillators and price rhythms have been synchronised. Hence, on our long term oscillators (lower rectangle), we also believe that Bitcoins may have reached a High Risk position ('HR'). **On our medium term oscillators** (upper rectangle)**, we would also be considering the possibility of a further extension into late December. Following that, we would also expect Bitcoin to consolidate to the downside for 3 to 6 weeks, before it accelerates up again into the Spring.** In terms of price targets, our I2 Impulsive 2 extended targets (right-hand scale) have been achieved so that there is little visibility.

Concluding remarks

From our statistical analysis, it appears that Bitcoin is following the dynamics usually attributable to Growth and Defensive stocks. Its de-trended correlation coefficients are for example especially high with US Utilities or the Nasdaq 100. Similarly to our projections on these, we would expect Bitcoin to extend up further during December, before it consolidates back to the downside into February. Following, that, we expect it to make a last acceleration up towards late Spring when it will eventually top out for 2018 along with Equities. Indeed, our study, hasn't shown any significant correlation between Bitcoin and true risk-off assets (Gold or Treasuries). Once Risk assets start to correct, Bitcoin should follow suit. These cyclical features of Bitcoin would imply that at some point Bitcoin prices should really start to fluctuate. Note: please be reminded that the above analysis is based on current correlations and future extrapolations of these.