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# De-Coding Crypto

Enigma Weekly

14th April 2021

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# Our Market View

**May you live in interesting times**. Everything up, by quite a lot. Finally got our ATH breakthrough on BTC, and that plus the Coinbase IPO have fueled significant leaps not only on BTC but on some very low-quality assets indeed; DOGE's +114% is the big example there. On BTC: still leaning bullish, and the big question honestly isn't whether or not we see higher before the end of the month (it would be very surprising if this was the top), but rather whether, with the hype around the Coinbase IPO, we are seeing the start of the inevitable cycle-ending frenzy; sentiment and momentum over the next few days will be very interesting in that regard.

On alts: ETH continuing to defy expectations for now, and things could get very interesting if it moves up to challenge its earlier yearly highs against ETHBTC. It probably isn't hurting that we have been seeing something of a reality check with regards to operational stability on some of the networks that have been steadily its thunder, with particular reference to Binance Smart Chain and a handful of issues cropping up this week with dapps syncing chain data.

*Please direct all enquiries about this week's research to jedwards@enigma-securities.io.*

Major

| Ticker | Price | 7D | 1M | 6M | 12M | Cap |
|---|---|---|---|---|---|---|
| BTC | 62930 | 11.3% | 11.1% | 453.3% | 782.2% | 1.176T |
| ETH | 2346.42 | 17.9% | 31.6% | 536.9% | 1201.0% | 270.9B |
| LTC | 264.21 | 18.5% | 30.3% | 464.6% | 526.4% | 17.64B |
| BCH | 803.71 | 23.9% | 48.7% | 221.5% | 240.1% | 15.04B |
| EOS | 7.360 | 20.6% | 90.9% | 192.5% | 183.7% | 7.03B |

Selected

| Ticker | Price | 7D | 1M | 6M | 12M | Cap |
|---|---|---|---|---|---|---|
| ADA | 1.424 | 19.9% | 37.4% | 1253.0% | 3934.0% | 45.61B |
| DOT | 41.47 | 3.5% | 19.0% | 945.8% | 1327.0% | 40.83B |
| LINK | 36.76 | 14.7% | 32.4% | 242.5% | 911.2% | 15.40B |

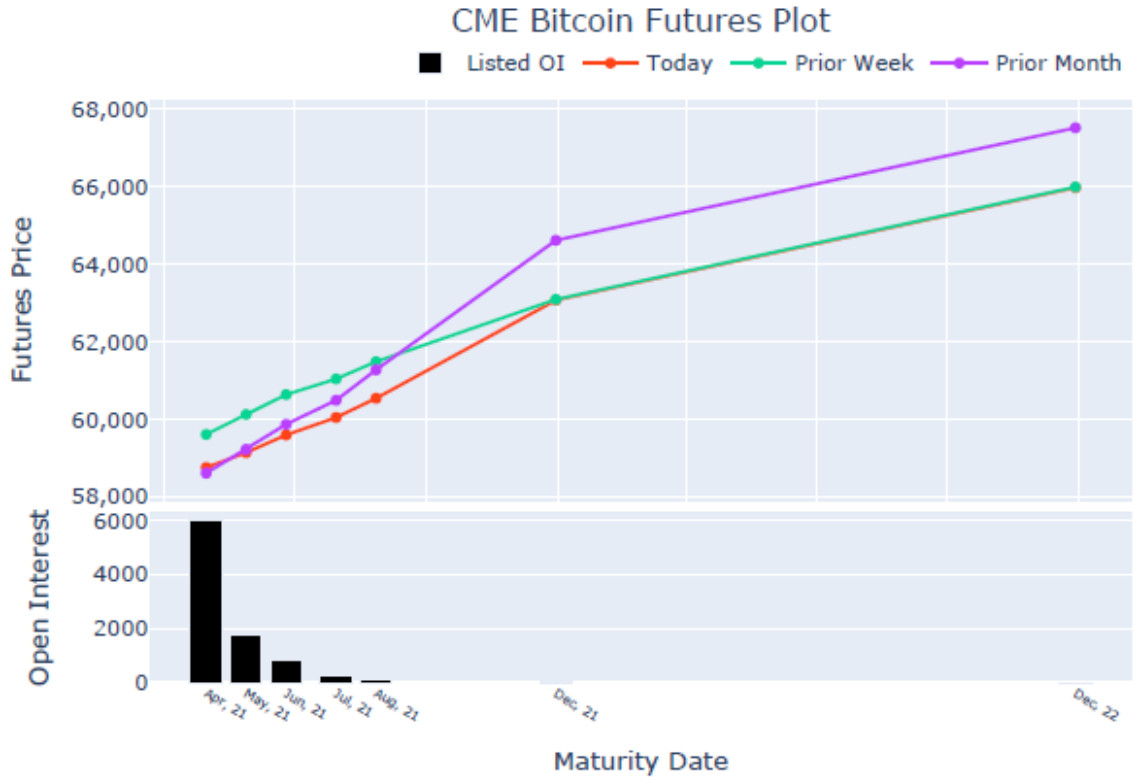
# The Bitcoin contango and CME futures: a discussion of discussions

We have tended to find it to be the case that, with regards to the discourse around financial markets in general, and around crypto markets in particular, the 'supercycles' of what topics are being discussed tend to move fairly slowly. Hence, every couple of months or so, we get treated to a few weeks of the same point of discussion slowly rumbling across the horizon, as it goes through its nature cycle - from 'some guy, somewhere' (typically someone with a title like "quant at GS" is the one who manages to really kick it off), to one or two particularly bright strategists expounding a bit more, and then eventually, it gets to the point where everyone has to expound on it.

In crypto right now, the current supercycle topic is the Bitcoin contango. We've seen discussion on this start to build over the last week, with a note from JPM last Friday really kicking it off, and it appearing on everyone's lips over the last couple of days as a couple of interesting contributions crossed the terminals from a couple of Bloomberg's best and brightest - first, from Joe Weisenthal in his markets newsletter (the relevant section is available through Twitter), and then later from Matt Levine in his own newsletter (available on the Bloomberg site for subscribers).

To try to avoid putting too fine a point of it: the Bitcoin contango is this (via our chartbook):

Source: CME, EnigmaX



Bitcoin futures (both on the CME and on other platforms) trade at a premium to spot, and have done so on a fairly consistent basis since April 2019. Even if we just take daily closes as our reference points, we find that in every single month since that time, there has been a close at which the futures product traded at least a 1.45% premium to spot, equating to a minimum of a 18% annualised premium:

| | Avg | Max | | Avg | Max | | Avg | Max |
|---|---|---|---|---|---|---|---|---|
| 2019 | 0.16% | 8.61% | 2020 | 0.46% | 19.18% | 2021 | 0.33% | 4.77% |
| Jan | -0.89% | 0.08% | Jan | 0.38% | 2.48% | Jan | -0.08% | 3.52% |
| Feb | -0.24% | 1.19% | Feb | 1.12% | 6.11% | Feb | 0.26% | 4.77% |
| Mar | -0.16% | 1.21% | Mar | 0.59% | 19.18% | Mar | 0.50% | 4.33% |
| Apr | 0.24% | 6.47% | Apr | 0.24% | 3.42% | Apr | 0.89% | 1.49% |
| May | 0.27% | 4.61% | May | 0.36% | 2.53% | | | |
| Jun | 0.29% | 8.61% | Jun | 0.02% | 1.91% | | | |
| Jul | 0.84% | 7.16% | Jul | 0.47% | 2.76% | | | |
| Aug | 0.31% | 3.08% | Aug | 0.78% | 3.33% | | | |
| Sep | 0.14% | 2.34% | Sep | 0.58% | 5.11% | | | |
| Oct | 0.36% | 3.18% | Oct | 0.40% | 2.32% | | | |
| Nov | 0.42% | 1.59% | Nov | 0.19% | 2.36% | | | |
| Dec | 0.18% | 1.45% | Dec | 0.49% | 2.70% | | | |

*Data via Tradingview. Differential is between CME price and BTCUSD Coinbase price.*

Of course, some of these max values owe to resumption after action while CME markets were closed (most clearly in the March example); still, there has generally been a theoretical entry point for a significant return to be found somewhere, and speaking generally, the default state has been contango; two-thirds of daily closes saw BTC futures price above spot price.

The consistent existence of this premium (and, as can be seen, its intensification recently) has inevitably become a topic of discussion, with the main question being, fundamentally, "why hasn't this been arbitraged away?" Specifically, this is usually with reference to the CME side of things; it's not too difficult to understand why e.g. such a trade would largely be self-excluding to somebody who was willing to hold open positions and therefore money for an extended period on the likes of Binance, for instance (especially in a year where underlying prices have done what they've done).

The first thing we should say: both Weisenthal and Levine (moreso Levine) start from a bit of an unfortunate assumption, which is that there isn't much money pursuing this idea in the first place. The truth is that not only is there a hell of a lot of it doing so, but that said money pursuing said trade has made up the vast majority of the short side of the market for over a year now. To give an example, this is the latest CFTC Committment of Traders report on said market:

Traders in Financial Futures - Options and Futures Combined Positions as of April 6, 2021

| Dealer Intermediary | | | Asset Manager/ Institutional | | | Leveraged Funds | | | Other Reportables | | | Nonreportable Positions | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Long | Short | Spreading: | Long | Short | Spreading: | Long | Short | Spreading: | Long | Short | Spreading: | Long | Short |
| BITCOIN - CHICAGO MERCANTILE EXCHANGE (5 Bitcoins) | | | | | | | | | | | | | |
| CFTC Code #133741 | | | | | | Open Interest is | 10,047 | | | | | | |
| Positions | | | | | | | | | | | | | |
| 501 | 264 | 31 | 355 | 519 | 115 | 2,466 | 7,485 | 646 | 3,121 | 177 | 20 | 2,794 | 790 |
| Changes from: March 30, 2021 | | | | | | Total Change is: | 543 | | | | | | |
| 8 | 21 | 4 | 1 | -15 | 10 | 152 | 340 | 110 | 114 | 1 | -5 | 148 | 77 |
| Percent of Open Interest Represented by Each Category of Trader | | | | | | | | | | | | | |
| 5.0 | 2.6 | 0.3 | 3.5 | 5.2 | 1.1 | 24.5 | 74.5 | 6.4 | 31.1 | 1.8 | 0.2 | 27.8 | 7.9 |
| Number of Traders in Each Category | | | | | | Total Traders: | 84 | | | | | | |
| . | . | . | . | 4 | . | 25 | 27 | 14 | 17 | . | . | | |

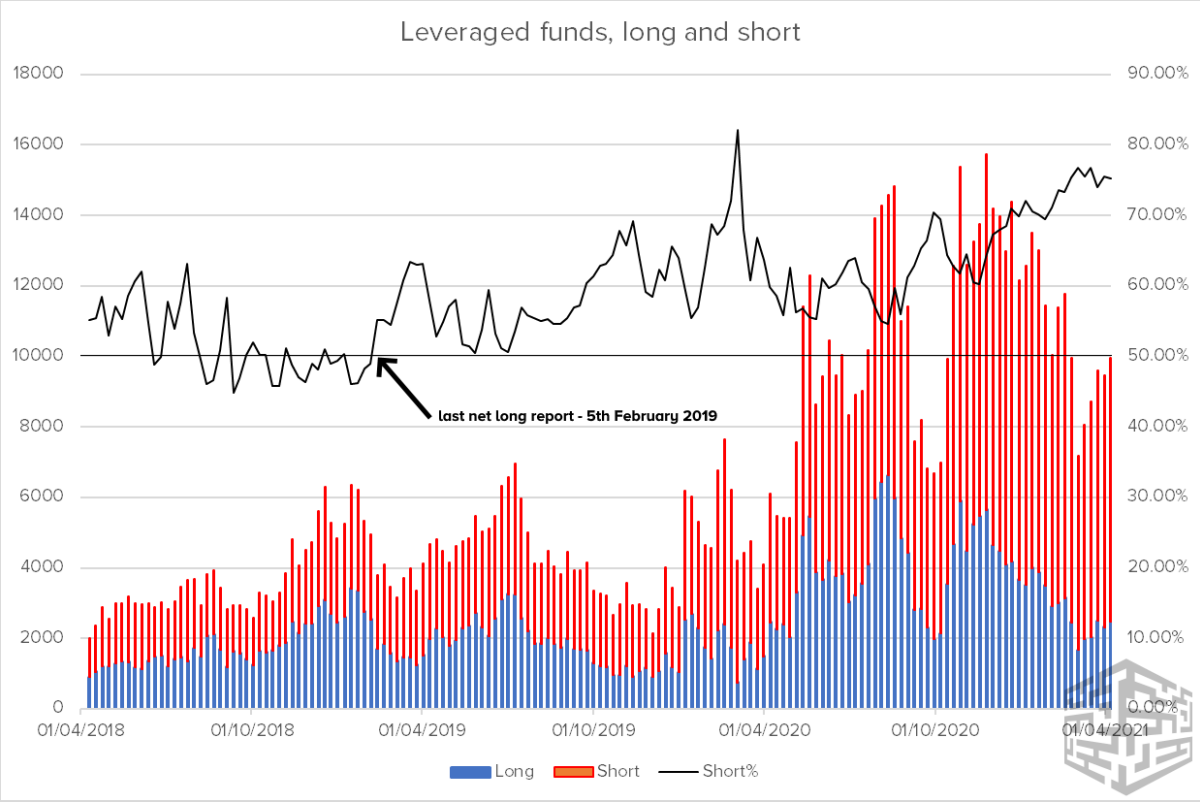
*Via CFTC.*

A hair under 75% of total short interest is held by 'leveraged funds'. What are these funds?

> These are typically hedge funds and various types of money managers, including registered commodity trading advisors (CTAs); registered commodity pool operators (CPOs) or unregistered funds identified by CFTC. The strategies may involve taking outright positions or arbitrage within and across markets. The traders may be engaged in managing and conducting proprietary futures trading and trading on behalf of speculative clients.

The CFTC definition here isn't terrifically helpful, but it gets enough of the point across. These are the large players in the CME BTC futures - not all of these are traditional firms (there are crypto-native funds that fall under this definition), but there is at least a decent share that are. They are, as of April 6th, short a net 5,019 contracts, or 25,000 BTC, or at today's prices, around $1.6bn.

You may, in fact, broadly be aware of this already; a couple of months ago, there was no shortage of commentators on most social platforms pushing narratives about the hedge funds being short Bitcoin and that it was the next big short squeeze. If you ignored it at the time, you may briefly be feeling silly now given what price has done since, but really, you shouldn't, because it was nonsense. The key thing to understand here is that the aforementioned leveraged funds category has, in the net, been heavily net short since (again) April 2019:




*Data via Tradingview.*

This gets to the heart of the matter - over the last couple of years, there has been hundreds of millions, now billions, of dollars being deployed into short positions on CME BTC every single month. (One quirk we should mention here incidentally is that almost all BTC volume, liquidity, OI etc. is on the upcoming monthly contract; we have seen some increase on early movements into May and June contracts this time around, but in general, quoted prices at the long end of the curve can be fairly meaningless/misleading because of that). If these were directional short trades, their proponents would have gone broke long ago; suffice to say, they are not. These are, overwhelmingly, arb trades on the basis at opportune times.

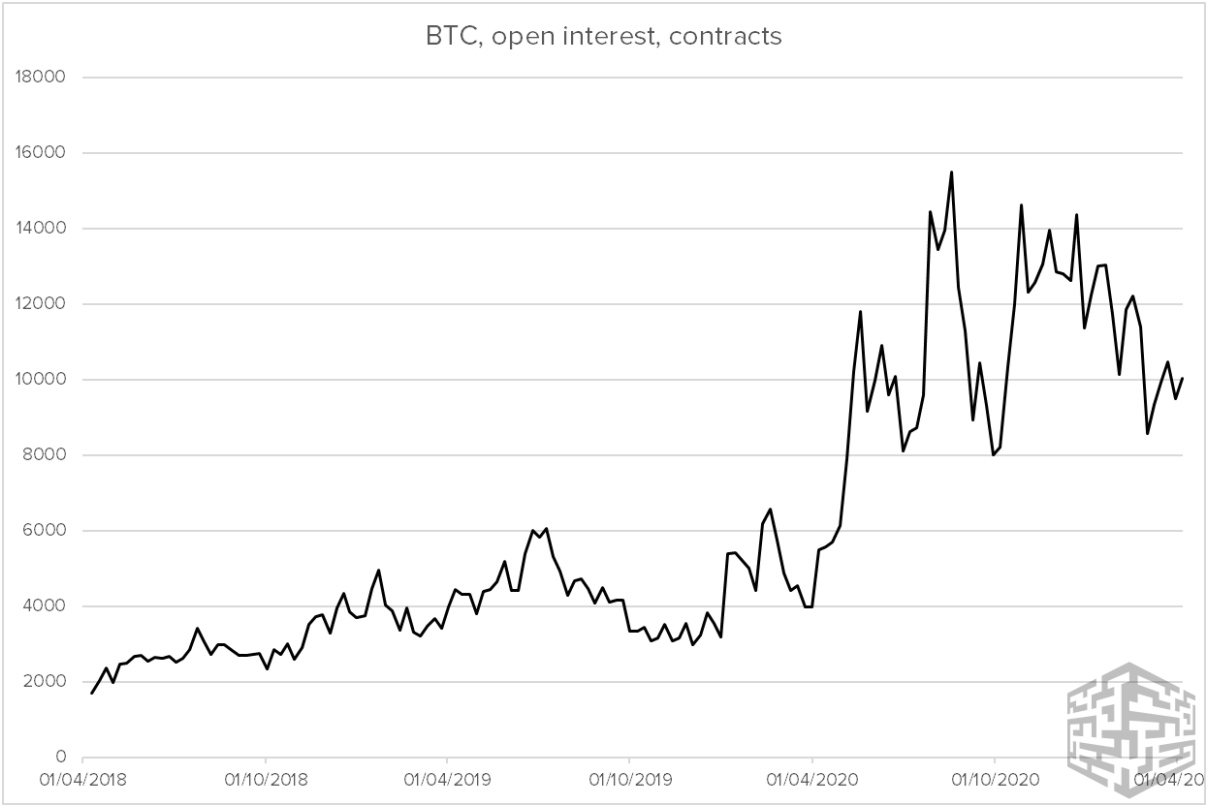
To be frank: the CME BTC market is as much arbitrage as anything else. One of our long-standing theses has been that the growth of crypto in 2020 in particular did not owe anywhere near as much as you'd think to directional speculation, but instead to the introduction of price-agnostic money into trades like the CME basis trade or, to give another example, trades based around crypto ETFs/ETPs issuance (most notably the Grayscale trade, which of course now finds itself mired in quite an unfortunate spot). The great development of 2020 wasn't institutional adoption so much as institutional acceptance - the JPMs and Goldmans of the world shrugging their shoulders and saying "we still don't like Bitcoin as an asset, but it's been around long enough and held up well enough that we're at least willing to handle it now".

So, the question remains: why isn't that gap closing? For both Weisenthal and Levine, it comes down to a question of custody. Levine makes a particularly interesting point:

> Buying bitcoin futures is a way to get exposure to bitcoin and avoid the bitcoin-storage problem: You never have to store bitcoins because you never own bitcoins; you just get paid dollars for the amount that bitcoin goes up. But the storage problem doesn't go away; you just offload it to the arbitrageur who provides you the bitcoin exposure. Maybe the arbitrageur needs to charge you $1,000 to cover her storage costs. If you think these markets are efficient, then the gap between the futures and the spot is telling you how much — in out-of-pocket expenses, in theft risk, in psychic pain — it costs to store bitcoin.

To be clear here: that is an excerpt of an excerpt, the original piece being written in December 2017. It is an interesting point. There certainly is a market that is still approaching products like CME BTC that way. The longs on the other side of those hedge fund shorts do appear to mostly be coming from family offices and the odd individual traditional trader and hence are forming the basis for the arb to exist in a sense.

However, that's the thing. The CME BTC market isn't growing in terms of market share.




*Data via Tradingview.*

What we have there is OI as denominated in contracts of 5 BTC for every CFTC report since it became reportable in April 2018. In BTC terms, CME markets actually peaked over the summer in the post-halving fervor (wherein a bunch of traditional traders bought into the halving narrative as an immediate catalyst for a massive price rise and, while not exactly getting burned, saw thousands of contracts expire unremarkably as price failed to break out of a $8500-$9500 range for several months).

This is, at least, a chart misdemeanour; of course dollar OI is up significantly because of what's happened to the underlying, and on a cash-settled contract in particular, it's dollar OI that actually matters for the most part. But the core point is this: as crypto volumes in general have grown beyond the scope of the general appreciation of the underlying (even Grayscale's GBTC, which ultimately finds itself in its current situation because demand for it as a product specifically didn't grow quickly enough, saw increases in that regard through to mid-January), CME OI, volumes, etc. haven't.

The reality is that not only has custody gotten easier since 2017 for institutions (as Levine admits), it isn't even comparable. What has Coinbase's push towards an IPO-able state over the last year or two been built upon fundamentally? Essentially, moving long-term beyond the retail market and into the institutional. How has it done that? By massively expanding its institutional business, crucially in terms of making itself an one-stop shop for firms wanting crypto exposure via strengthening its custodial arm.

According to the IPO S-1, institutional volumes in Q4 2020 made up 64% of Coinbase's total volumes. It also made up just 7% of Coinbase's revenue - 5% on the trading side, and 2% on the custodial side. Coinbase Custody's base price for institutionals is 0.50% per year. This is of course just one example, but it's a theme throughout the industry: if you are looking to make any sort of serious commitment to Bitcoin or crypto as a big firm, there are at this point multiple options in terms of custody that are extremely cheap, have sufficient provenance (in terms of their actual age/size to an extent, but moreso with regards to their integration with regulatory regimes etc.) to the point that they hold water with all but the most hostile of compliance departments, etc.

We mention all of this to make the point: making this sort of arbitrage sufficiently efficient does ultimately require a sufficiently liquid market on both sides to make it work - and this ultimately strikes at the heart of the problem with CME BTC. The product, as it exists, is a dinosaur, even going to its basic structure. As we mentioned: every CME BTC contract has a 5 BTC value. We can't be exact with regards to when the specifications of the contract were originally hammered out, but remember: on September 1st, 2017, BTC traded at a hair under $5,000. On 24th November, 2017, it was at $8,000. Not only was it not designed for an environment when 5 BTC = $300,000, it was probably decided upon way before even the 2017 peak of $20,000 was seriously in many's mind's eye. (In fairness to the CME, they do recognise this flaw, and will be introducing micro futures (with 0.1 BTC contracts) in May).

It's a bizarre thing ultimately: it's a big, slow. fat, lumbering beast of a product existing in contrast with a hyperliquid market to arb it off - but it's so big and slow and fat, and the underlying is so mobile, that it's actually undermining the ability to efficiently pull off the arbitrage, and even those firms who are pursuing it as a trade are giving themselves significant leeway in that execution, and hence allowing it to maintain that significant nominal contango.

***Until next week – thank you for reading.***

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## ABOUT US

Enigma Securities is a leading, regulated liquidity provider, offering its clients bespoke liquidity solutions through the use of a proprietary electronic trading platform and API access.

The firm was founded in 2017 as a subsidiary of Makor Partners Limited (UK), amid growing institutional demand for digital asset trading. Looking to seize the new, exciting opportunities presented by cryptocurrencies and blockchain technology, Enigma became one of the first regulated brokerage firms to set up banking relationships and custody solutions to meet institutional standards.

Since its launch, the firm has expanded its capabilities to the broader Fintech arena, leading innovation while working to bridge the gap between the traditional financial services industry and cryptocurrency markets.