copper.co

Cointango: Are Institutional Investors Missing Risk-Free Opportunities?

Date
March 2021

In-depth series
N°12

Cointango: Are Institutional Investors Missing Risk-Free Opportunities?

The shortest path between two points is a straight line. Unfortunately, it's unlikely that the Greek mathematician Archimedes, who is credited with this quote, had accounted for modern financial markets. Today, traders are measuring the Alpha and the Omega on the vast amounts of trading strategies and products available to them on global markets. Limited only by capital, traders have found ingenious mathematical ways to build out their outlook employing Technical Analysis and forging fundamentals in order to eke out the best return.

Cryptocurrency markets, now on the cusp of becoming mainstream as exchanges begin to float, have only added to the opportunity around the clock. But there seems to be a disconnect between the very premise of decentralised digital assets, and cryptocurrency markets on institutional-geared trading venues.

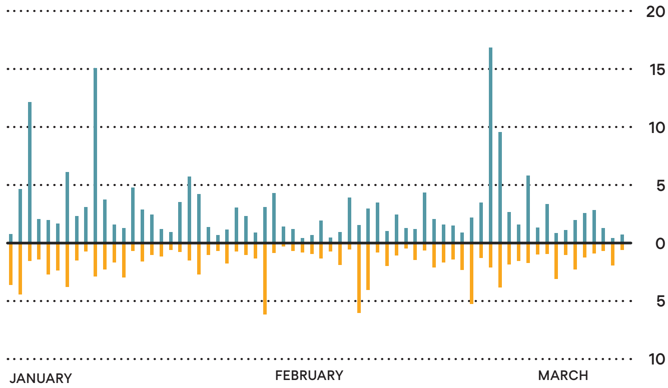
Central to the appeal of Bitcoin is its fully open-source and decentralised nature. By holding an asset that is censorship-resistant and that can only be controlled by the investor, the counterparty risk factors drop down to near zero. Today, however, cash-settled futures and Exchange Traded Products are taking priority by institutional investors trading at massive premiums. This is primarily due gross overestimation of storage and insurance costs. These premiums have rippled into futures prices leaving the door open for investors to take advantage of price discreptancies by holding 'physical' Bitcoin. Copper assess a traditional risk-free arbitrage trade.

Bitcoin market participants have long favoured being bulls. Evidenced by the fact that the majority of liquidations across cryptocurrency markets happen on Long positions (see chart 1). This is the preferred option by traders for multiple reasons, not limited by the fact Bitcoin is a disinflationary asset which helps traders supply/demand analysis. The ability to use leverage also means unlimited upside, unlike a short position.

Overleveraged positions by traders is most likely the case too. So far in 2021 alone, 'Long' positions have accounted for a massive 62% of liquidations. The irony is not lost on anyone that such mass liquidations have happened during a bull market.

Regardless, this permanent 'Long' bias has trickled down into Bitcoin's characteristics as a financial asset on global markets, and can be seen in the pricing of forward dated futures.

1: Bitcoin Futures Liquidations This Year Long vs. Short ($bn)



Asset Class Exposure Benefits & Costs

Asset Class	Benefits	Costs
Bonds	Bond Coupon	Financing Rate
Currencies	Foreign Deposit Rate	Local Deposit Rate
Stocks	Dividend Yield	Financing Rate
Volatility	Hedging	Insurance Premium
Commodities	Convenience Yield	Storage, Transport, Insurance & Financing Rate

Much like gold, Bitcoin has taken on the same expectations on commodity futures markets. Due to the prevalent belief among Bitcoin investors that the cryptoasset's scarcity and increasing demand over time will drive further price appreciation, forward dated futures trade in Contango. This means that the futures prices are trading above the spot price. Traders and markets generally attribute this price difference to storage fees, insurance and transportation costs (see table). While some of this might apply to Bitcoin, it is in fact a negligible cost. Copper calculates the total life-cycle costs of a trade (from fiat-to-fiat) for institutions including banking, OTC, trade, delivery and custody fees to be around 1.25%

The costs of holding and trading physical Bitcoin seems to have been overly exaggerated by institutional markets. Up until recently, Grayscale's Bitcoin Investment Trust (OTC:GBTC) traded at a 40% premium to its Net-Asset-Value (NAV). However, since Bitcoin began to rally and supply constraints began to further grow across global exchanges, the premium unwittingly went into the negative. But is that the best exposure to Bitcoin? Grayscale's negative premium might seem like an opportunity. Until it reverts back into high premiums, prompting risk-averse money managers to avoid the asset class in its entirety.

But traders, as mentioned at the start of this report, have figured it all out already. A classic trade that money managers used to employ regularly was the 'Cash-and-Carry' Trade. Such a trade would allow investors to quickly take advantage of the premiums or discounts found on spot prices against futures. However, the return and opportunity of this has been fairly small on institutional venues trading traditional assets. Especially in recent times where stock markets and hard assets are making outstanding returns.

Ironically however, the maths, as we will show, points to the fact that the world's most volatile asset (see chart) can also serve as the risk-free trade of the decade with **zero** sensitivity to Bitcoin's radical price swings.

Eureka! (Yes...Also Archimedes)

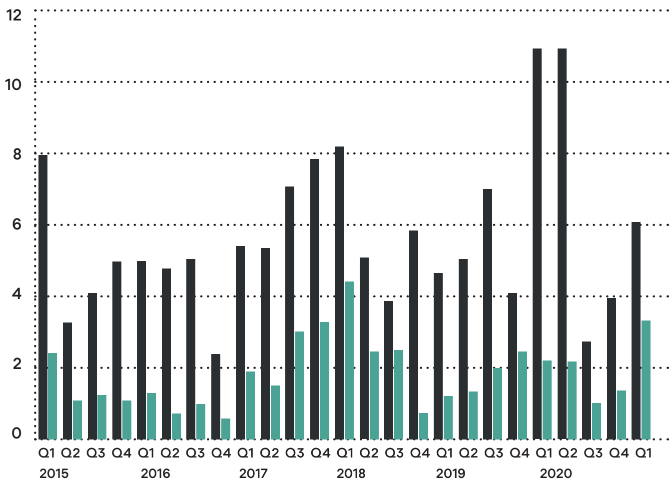
While forward dated futures on CME trade at a maximum premium of 4% (+/-), cryptocurrency exchanges for the same expiry date are trading 50% higher. But exchanges with a pure focus on such products have developed contracts further forward into the year. As of writing, a September 2021 futures contract on Deribit is trading at a whopping 12% premium. That is a 21% annualised premium besting 2020 SP500 returns under the largest monetary expansion the world has ever witnessed.

The 'Cash and Carry' trade would simply require investors to purchase spot which is trading below the September contract by 12%. Investors would then sell (or short) the futures contract on Deribit. This would immediately 'Lock-In' the premium. It also means that investors would have no exposure to the price of Bitcoin any longer. All that is needed is patience for the contract to expire on its own, at which point the spot and futures price will diverge. Then, investors can opt to at this point resell their Bitcoin on spot markets or roll into a new contract (see table).

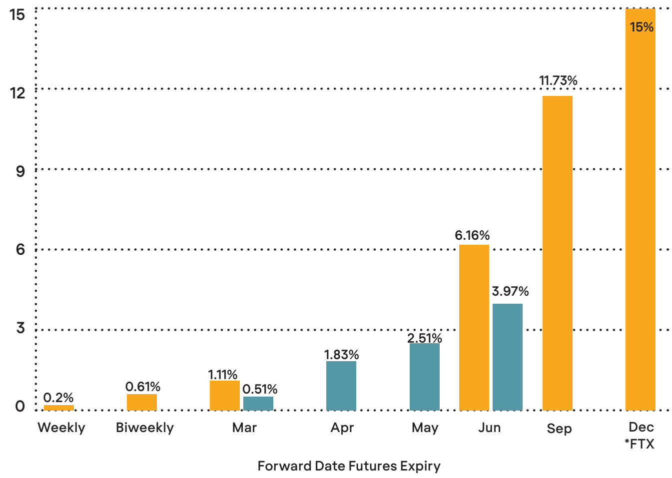
There is a little cherry on top of this trade that would reward bears even further. Should markets crash, investors will have earned themselves a risk-free premium above anything traditional markets offer, and more Bitcoin. And while the total dollar value might be the same, in the event of a sharp price drop, investors have just gained a larger percentage of the Bitcoin pie.

The only counterparty-risk that can be identified in such a trade is the exchange itself. But there are solutions that overcome even this risk as the cryptocurrency industry continues to cater to such concerns. The only question is, whether or not investors who take this trade will turn bullish after a bear market rewards them with more Bitcoin - risk-free.

2: Peak 30-Day Rolling Volatilty (By Quarter) Maximum / Minimum (%)

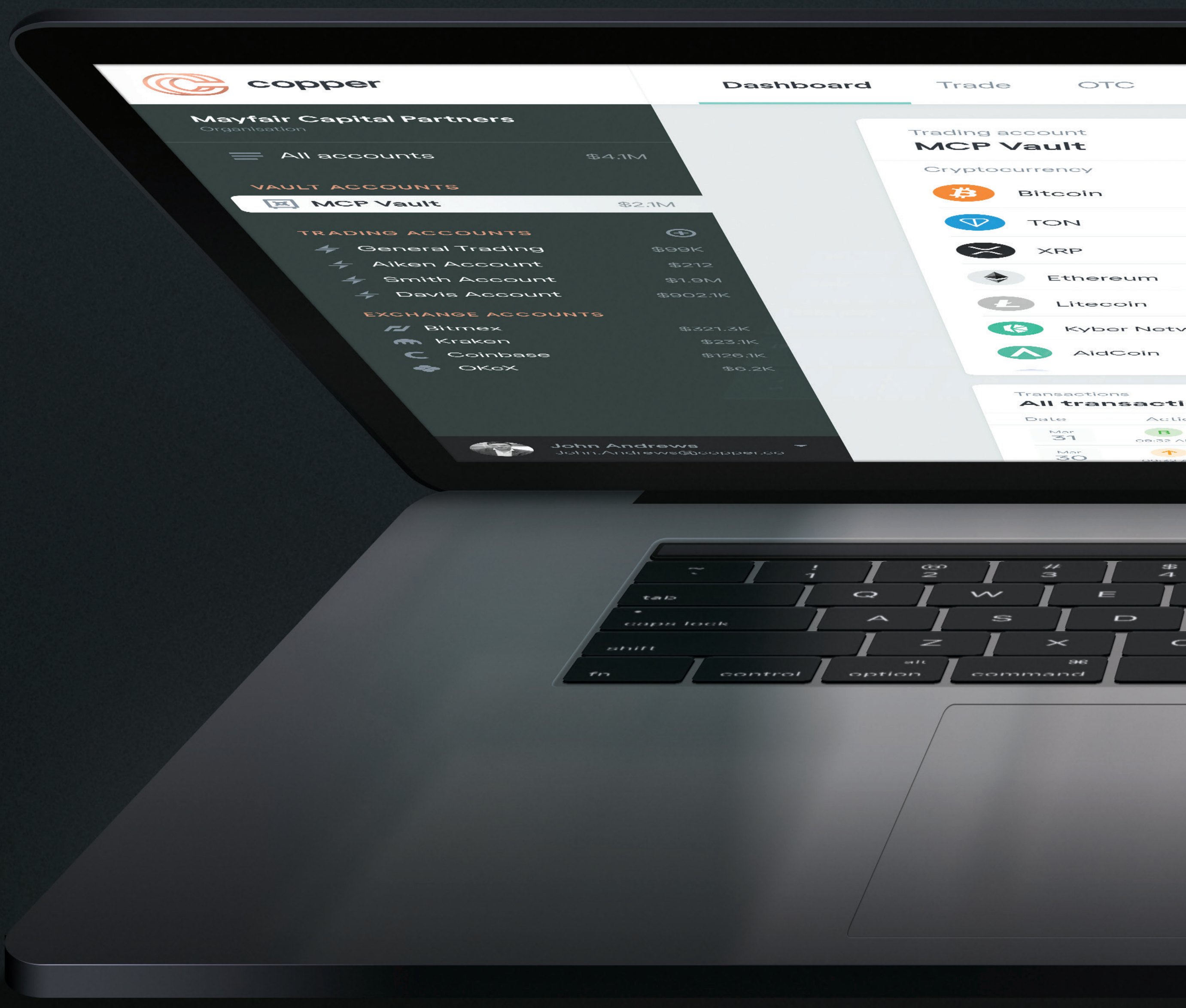


3: Forward Dated Futures Trading at a Premium Deribit* vs CME



Bitcoin Cash & Carry Trade Cycle	Bull Market	Bear Market
Cash Investment	$250,000	$250,000
You Buy Bitcoin on Spot Market at	$ 50,000	$ 50,000
Your Bitcoin Balance is now	+5	+5
You Sell Dated Futures at	$ 55,000	$ 55,000
You've 'Locked-In' a Premium of	10%	10%
Your Short Position Value is	-275,000	-275,000
Bitcoin Price at Expiry	$ 75,000	$ 25,000
BTC Balance on Delivery	+3.67	+11.00
You Sell Bitcoin back on Spot Market	+275,000	+275,000
Full Trade Cycle Fees (Fiat-to-Fiat)	(3,410)	(3,410)
Net Balance	$ 271,590	$ 271,590
PNL	$ 21,590	$ 21,590
Net Risk-Free ROI	**8.6%**	**8.6%**

Ready when you are.



Pioneering digital asset
infrastructure for institutions

copper.co