Ahead of the curve

Market Update

Bitcoin familiarizes itself with >\$100k

BTC has once again ventured over the \$100,000 mark, but this time with a more robust leverage profile. BTC demand from both ETFs and public companies supports the leading crypto asset's rally to new all-time highs. The liquidation cascades that followed BTC's first attempts to enter six-figure territory have wiped out over-zealous leverage from perp traders as funding rates have since muted considerably. ETH open interest and CME premiums remain high, but price ultimately continues to lag BTC.

Meanwhile, in a watershed moment for what some consider digital gold, relentlessly positive U.S. Bitcoin ETF flows and price appreciation have pushed the AUM of U.S. Bitcoin ETF products above the total AUM in U.S. gold ETFs despite gold's 20-year head start.

CME traders remain bullish while offshore traders remain wary

CME open interest has pushed higher to approach all-time highs while premiums for both BTC and ETH hit 16.4% during this ATH breakout. The contango has also widened to highs not seen since November 2023. The December contract on CME is the richest, with open interest equal to 113,480 BTC sitting in the contract. The December roll will be considerable, with several banking holidays likely contributing to widening the January premium.

As we anticipated last week, muted funding rates have contributed to a more sober \$100,000 breakout this time around. BTC continues trading at all-time highs while funding rates have yet to rise above neutral, with perps still trading at a slight discount to spot.

MicroStrategy added to the Nasdaq-100 Index

Crypto's favorite technology firm, MicroStrategy, has been added to the Nasdaq 100. This means MSTR will see a new passive bid as index funds buy the stock to track the index. MSTR is expected to have a 0.47% weighting in the index, meaning MSTR would experience around \$2.5bn worth of buying pressure before the December 23 add.

Meanwhile, MicroStrategy continues acquiring BTC, adding another 15,350 BTC for \$1.54bn over the past week. Following this purchase, the firm has \$7.65 billion left from its \$21 billion ATM offering. At the current pace, MicroStrategy will have fully realized its proposed 3-year ATM offering plan in 2.5 months on January 13. Since the 21/2 began, "only" \$3bn of the \$21bn in senior notes have been issued.

25bps cut expected for now, but odds of a Fed pause rise

Favorable inflation and employment numbers precede the Fed's final rate decision for the year on Wednesday, and the market has confidently priced in a 95.4% chance of a 25bps cut. If this were to materialize, it would mark 100bps in cuts since September. Steady economic data combined with steady progress in rate cuts has also resulted in heightened expectations of a Fed pause in QI 2025.

After the FOMC, weeks of no major macro releases await. Saylor's aggressive accumulation, Trump's inauguration nearing, and favorable dynamics among CME and perp traders all signal a strong end-of-the-year performance from BTC.

Figure 1: Annualized CME Futures Basis Premium over Annualized Funding Rate

Digital Assets

Signals from the market

Vetle Lunde Head of Research vetle@k33.com +47 416 07 190

David Zimmerman

Analyst david@k33.com

By the numbers

BTCUSD \$107,651	ETHUSD \$4,013
7d: 11%	7d: 9%
30d: 18%	30d: 28%

Open Interest (BTC futures and perps)

\$59.4bn 550,000 BTC (**5.2%** last seven days)

Average daily BTC spot volume

\$5.5bn (-26% last seven days)

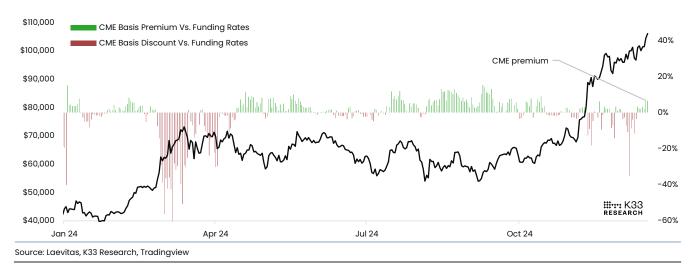
BTC 90-d correlations (weekly change included)				
ETH	Gold	S&P 500	DXY	
0.80 (0.00)	0.05 (0.01)	0.40 (<mark>-0.05</mark>)	-0.01 (<mark>-0.01</mark>)	

Percentage of Total Market Capitalization

weekly change in percentage points			
BTC	ETH	Stablecoins	Rest
56.4% (0.4%)	12.8% (-0.1%)	3.9% (-1.3%)	26.9% (1.0%)

Last week of top 50 by market cap

	Ticker	7d	YTD
Gaine	ers		
1	HYPE	91%	х
2	BGB	45%	567%
3	AAVE	34%	238%
Loser	S		
1	TAO	-5%	102%
2	PEPE	-3%	1705%
3	ОМ	-2%	6578%



Spot Market

Deleveraged with healthy momentum

Delayed by leveraged enthusiasm, but this week, \$100,000 was firmly surpassed. The week has seen strong and steady upward momentum in BTC as demand remains relentlessly strong, with both ETFs and public companies continuing to buy in size.

The initial \$100k push on December 5 was followed by a prompt and massive risk-on sentiment, leading to multiple leverage cascades. Liquidation squeezes brutally rinsed the market of exuberance and leverage, with metrics currently sitting at far healthier levels. Namely, following the deleveraging events, funding rates in perps have softened, with perps currently trading at moderate discounts to spot markets, reducing the likelihood of imminent whipsaws.

This week has revolved around BTC leading the pack, exemplified by ETH facing slight underperformance versus BTC. The relative BTC outperformance is mirrored across the crypto market, with BTC dominance rising from 56% to 56.4% over the past week.

We expect this week's FOMC to contribute to the market's volatility, with traders largely preparing for a 25bps cut by the Fed. Following the FOMC, quiet macro weeks await, potentially setting the stage for BTC momentum to further materialize during the Holiday season.

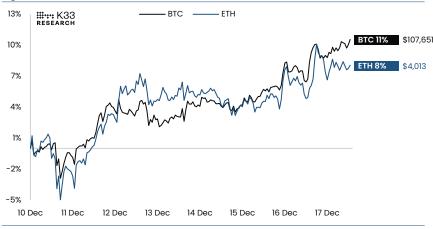


Figure 2: Performance BTC and ETH, Last Week

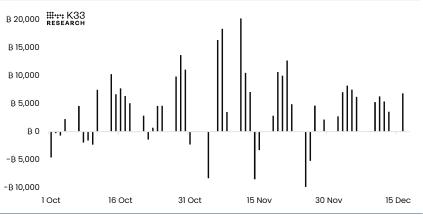
Source: Tradingview, (Coinbase, Binance)

U.S. Bitcoin ETF AUM surpass U.S. Gold ETF AUM

Bitcoin ETPs have had yet another solid week, adding 27,362 BTC over the past week, with MTD inflows sitting at a solid 58,909 BTC. Bitcoin ETFs have added 155,832 BTC since the U.S. election, and together with public companies, they have been a huge contributor to BTC's massive rally.

Remarkably, the flows and appreciation in BTC <u>have pushed the AUM of U.S. BTC ETF</u> products (spot and leveraged) above the total AUM in U.S. gold ETFs despite gold's 20year head start.

Figure 3: Daily Global Net BTC ETP Flows



Source: K33 Research

Headlines last week

FTX customers to get distributions through Kraken and BitGo with bankruptcy plan set to be effective on Jan. 3

MicroStrategy to join Nasdaq 100, QQQ ETF following 500% rally this year

Incoming committee chair Rep. French Hill plans to prioritize digital asset legislation in the new year

<u>Trump remains keen on strategic crypto reserve</u> with aim of making US industry leader

<u>Goldman Sachs CEO says firm could consider</u> <u>bitcoin, ether trading if US regulations shift</u>

Calendar

Wednesday, December 18

U.S. Interest Rate Decision (Exp: 25bps cut)

Thursday, December 19 • UK Interest Rate Decision (Exp: unchanged)

Friday, December 20
U.S. PCE (Exp: 0.2% MoM)

Monday, December 23 • MicroStrategy Nasdaq Inclusion Day.

Tuesday, December 24 • Christmas. Early close.

Wednesday, December 25 • Christmas – Banking Holiday

Thursday, December 26

Christmas – Banking Holiday

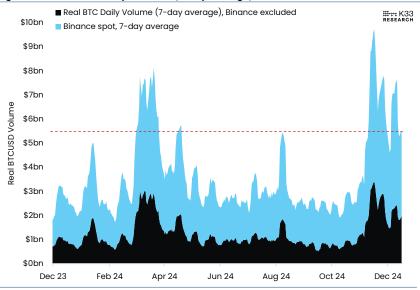
Spot Market

Softening volumes, climbing prices

Trading volumes in bitcoin declined by 26% over the past week, with average daily spot volumes averaging \$5.5bn. Declining volumes alongside rising prices suggest that buyer endurance was higher than seller endurance during BTC's short-spanned consolidation period.

This temporary sell-side exhaustion suggests that the market is ready to discover new highs against the backdrop of weekly buying pressure to the tune of billions in ETFs and from public companies.

Figure 4: Real BTCUSD Daily Volume* (7-day average)



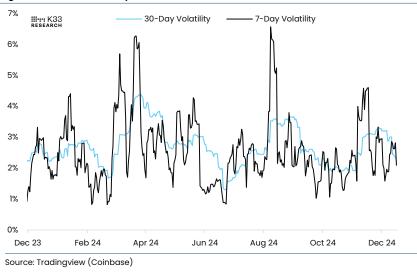
Source: Tradingview, Bitcoinity *Includes Bitwise 10 exchanges

A harmonic breakout

Bitcoin has pushed to new all-time highs on downward trending volatilities as BTC has faced back-to-back days of higher highs.

The 7-day volatility has declined to 2%, whereas the 30-day volatility has fallen to 2.2%, a low not seen since the U.S. election.

Figure 5: BTC-USD Volatility



Fear and Greed

Now: 87 (Extreme Greed) Last week: 78 (Extreme Greed) Last month: 90 (Greed)

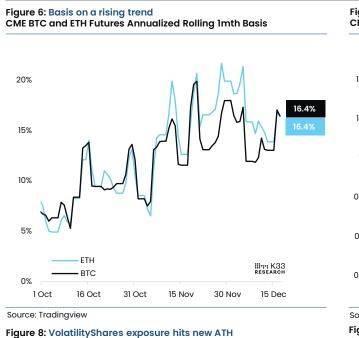
Derivatives CME, Futures and ETFs

CME activity has been strong over the past week. Open interest has pushed higher with growing premiums alongside the ATH breakout, while the contango has widened to highs not seen since November 2023.

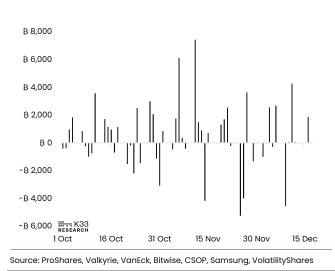
Bitcoin and ETH futures trade at equivalent annualized premiums of 16.4% after growing over the past week. Basis surged amidst the Monday ATH breakout, suggesting that CME traders expect favorable momentum ahead.

The January contracts are trading at sharp premiums to the December contracts, with the contango widening to 1.5% on Monday. This is the highest recorded next-month premium since November 2023. The December contract on CME remains the richest, with open interest equivalent to 113,480 BTC sitting in the contract. The December roll will be big, with several upcoming banking holidays potentially contributing to widening the January premium.

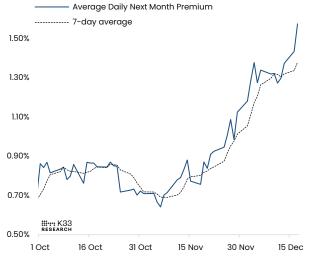
Open interest is approaching all-time highs. Open interest held by active market participants sits at 103,000 BTC and has grown by 14,000 BTC since last Tuesday. Leveraged ETFs are also seeing considerable activity, with VolatilityShares exposure hitting a new all-time high of 76,370 BTC on December 16.





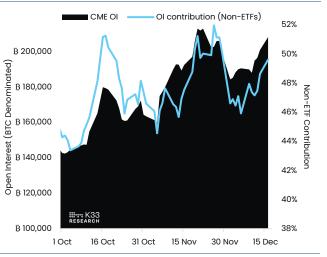






Source: Tradingview

Figure 9: Non-ETF OI back above 100,000 BTC CME BTC Futures: Open Interest



Source: CME, ProShares, Valkyrie, VanEck, Bitwise, CSOP, Samsung, VolatilityShares

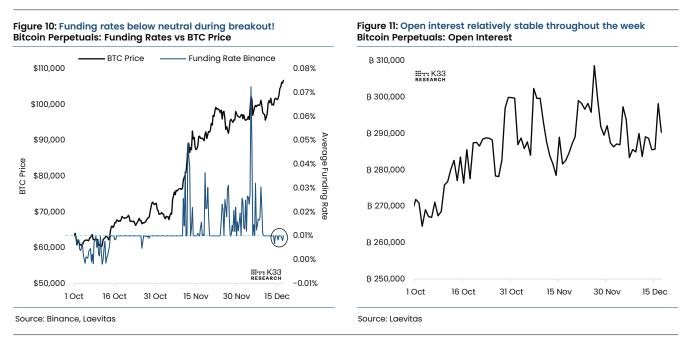
K33

Derivatives Perpetual Swaps and Options

Perpetual swaps

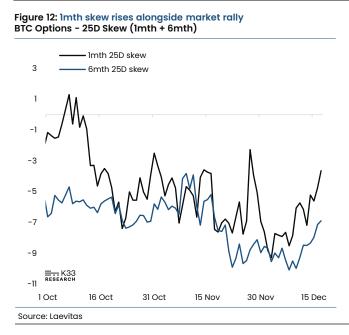
We noted last week that waning funding rates were a welcoming signal favoring a more harmonic \$100,000 breakout, which materialized by the end of the week. While bitcoin trades at all-time highs, funding rates have yet to push beyond neutral levels over the past week, with perps still trading at slight discounts to the spot market.

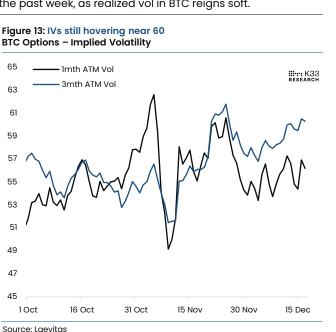
This suggests that the massive euphoria following the \$100,000 breakout has reached its conclusion, making the market far more robustly positioned to maintain its recent momentum.



Options

We have seen moderating skews in shorter tenors in the last week amid softening call demand with BTC pushing higher. Overall, skews remain firmly negative across tenors as options traders maintain a bullish bias. Implied volatilities have hovered in the 50-60% range for short and medium tenors over the past week, as realized vol in BTC reigns soft.





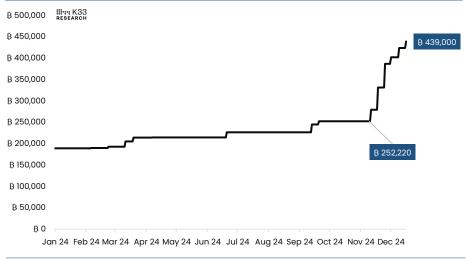
A deeper dive MicroStrategy added to the Nasdaq 100

MicroStrategy has officially been included in the Nasdaq 100, which means that index funds will have to buy MSTR shares to track the index. It's estimated that MicroStrategy will get a 0.47% weighting in the index. ETFs tracking the Nasdaq hold an AUM of approximately \$550bn, meaning that MSTR would experience roughly \$2.5bn worth of buying pressure before the December 23 add.

Following the inclusion, every owner with a passive exposure to Nasdaq will hold a light BTC exposure, marking yet another watershed moment for Bitcoin.

Through its ATM offering, MicroStrategy continues its relentless BTC purchasing strategy and has acquired a further 15,350 BTC for \$1.54bn over the past week. The company currently holds 439,000 BTC, and its enterprise value trades 2.1 times the value of its BTC holdings.

Figure 14: MicroStrategy Bitcoin Treasuries

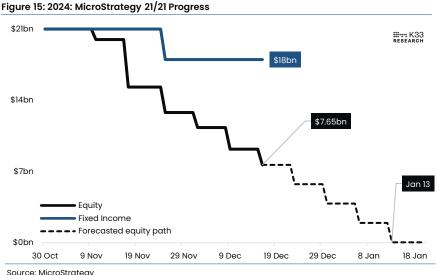


Source: MicroStrategy

On a path to deplete its ATM by mid-January

Following the last purchase, MicroStrategy has \$7.65 billion left from its \$21 billion ATM offering. Over the past four weeks, weekly BTC purchases from MicroStrategy have averaged \$1.9025bn. If the next weeks follow a similar pace, MicroStrategy may have fully finalized its proposed 3-year ATM offering plan in 2.5 months on January 13.

While the company has sold shares aggressively, "only" \$3bn worth of senior notes have been issued since the introduction of the plan, with the implication being that MicroStrategy's treasuries are currently getting less and less leveraged.



Source: MicroStrategy *Forecast based on the average ATM offering of \$1.9025bn from the past 4 weeks.

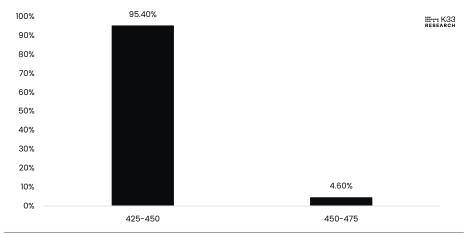
A deeper dive 25bps cut incoming?

2024s final FOMC is coming up this Wednesday. Inflation has shown signs of stalling over the past months, while employment numbers remain robust. Yet, the market largely expects a 25bps cut, pricing in a 95.4% chance of a 25bps cut at the upcoming Fed Press Conference.

If the Fed cuts 25bps further in the December meeting, rates will have been cut by 100bps since September. That has given the Fed room for a pause should economic indicators continue to signal robust employment data while inflation trails above its 2% target.

Currently, the market positions for rates to remain at target rates of 425–450 during the January 29 FOMC, while the market's opinion on the March 19 FOMC is split between another cut or unchanged rates.





Source: CME Group

Macro vacuum post FOMC – ideal conditions for a santa rally

After the FOMC, weeks of no major macro releases await. This gives the market ample time to digest the FOMC and the pre-inauguration momentum to solidify. With Saylor's aggressive accumulation, Trump's inauguration nearing, and solid market conditions entering the Holiday season, BTC is well-positioned to end the year on a high note.

We find the recent CME premiums vs. perp funding rates particularly favorable for a solid yearend performance. Funding rates have cooled off after the initial \$100,000 euphoria gripped the market and have trailed in neutral territory throughout the week, while CME premiums have faced an uptrend on a steepening contango.

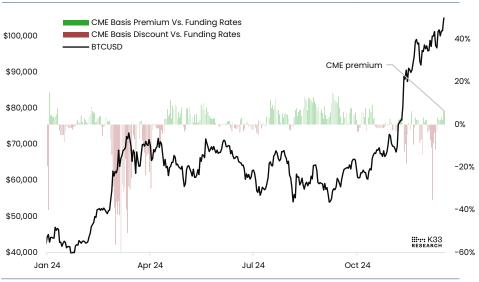
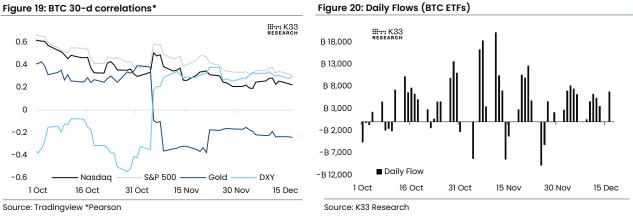


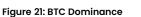
Figure 17: Annualized CME Futures Basis Premium over Annualized Funding Rate

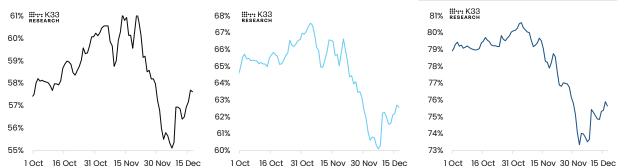
Source: Laevitas, K33 Research, Tradingview

Market Related Charts

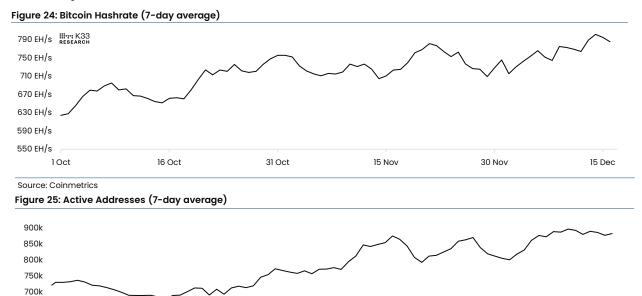
Data updated Tuesday, December 17, 2024







Source: Tradingview



 650k
 Immer K33

 600k
 IS Nov

 1 Oct
 16 Oct

 31 Oct
 15 Nov

 30 Nov

Source: Coinmetrics

Figure 22: BTC + Stables Dominance

Stables Dominance Figure 23: BTC + Stables + ETH Dominance

Why we choose the charts we do

Heavy Bitcoin focus

The crypto market is heavily correlated. Movements in BTC tend to be reflected by sharper moves in altcoins. In many ways, BTC is the lower beta exposure alternative to crypto and the definite market leader. However, don't worry – whenever we find a topic, a coin, or some tendencies worth drilling deeper into – we will. This report will get you the most important information from the crypto market.

Market by the numbers

We highlight the most critical market data by numbers in this table. A glance at these data should be sufficient to assess the state of the market superficially.

Open interest is an essential underlying market driver. Crypto tends to be very volatile, and leverage exacerbates volatility. We have had frequent massive liquidation cascades throughout the last years, mostly towards the downside, but we've periodically seen short squeezes emerge. During the March 12th collapse in 2020, cascading liquidations were the root cause of the absolute carnage in the market. You should always pay close attention to open interest if you aim to be an active participant in the market. Our derivatives pages will contribute to delivering you a directional assessment of the data.

The spot volume is an efficient way to gain an overview of the general activity in the market.

Correlations have been growingly important in the last year due to the complicated macro picture post-COVID. It's important to be aware of BTC's, for now, close relationship with U.S. equities and its inverse relationship with the dollar strength index (DXY). However, the current correlation regime is unlikely to be as strong as today forever. Through awareness of correlation trends, you may be able to execute trading strategies before the market catches up to correlations breaking.

The simplified market cap distribution box allows you to assess the general risk sentiment in the market quickly. In general, the "Rest" category may be used as a proxy for risk aversion in the market. Currently, BTC, ETH, and stablecoins represent nearly 75% of the crypto market, which is telling for a risk-averse crypto market.

The two charts on the first page illustrate the two most interesting topics covered in our market analysis. A more thorough examination of these charts is found in the last section of the report, where we dive deeper into two topics that currently seem to drive the market.

Spot Primer

Top 3 coins

We explore the last week's performance of the top 3 cryptocurrencies to asses deviations and opportunities within the safer bracket of digital assets. Currently, BTC, ETH, and BNB represent the three largest. Both ETH and BNB have a thriving DeFi user base and unique drivers of price and demand, which could generate temporary or long-term correlations within crypto to decline as trading opportunities arise or spread trade opportunities.

Indexes

We use the Bletchley Indexes to gauge and assess market activity across BTC and altcoins grouped by market cap size. Documentation for the index weights may be found at through <u>this link</u>.

Volume

The BTC spot volume is an efficient way to communicate the general activity in the market. It may help you identify frantic market bottoms or peaks. Our volume data is based on Bitwise's 10. In 2019, Bitwise explored wash-trading and market manipulation in the spot market, leading to this index. In general, our volume assessment likely underestimates the volume to some degree, as legitimate volumes in other exchanges are excluded. However, the volume estimate is a good proxy for general activity in the market.

We differentiate Binance's volume from the remainder of the exchanges due to Binance's removal of trading fees this summer. We believe a substantial amount of the recent trading volume on Binance is related to "inorganic" trades, i.e., high-volume trading strategies that were not economically feasible prior to fees being removed. Of course, removing fees has likely also contributed to moving traders from alternative exchanges over to Binance.

Volatility

Volatility is a topic well worth paying attention to. In specific periods, such as the current – where BTC trails in a shallow volatility regime, new trading opportunities emerge related to options and straddles. This chart is handy to pay close attention to, as it may help you enhance your ability to act on opportunities in the market when activity is low and options are becoming cheap.

Derivatives primer

Why should you care about derivatives flows?

The crypto market is periodically extremely volatile, and activity in derivatives enhances the market reactions. Crypto derivatives are at the cutting edge of financial innovation, the offshore market is periodically wild, and animal spirits tend to take over. Derivatives more or less always carry a clue of overheating in the market or full-on depression. It's highly actionable and worthwhile understanding if you aim to be an active crypto market participant.

The market is also clearly divided. There are two branches worth monitoring – institutional and offshore. Both components periodically lead the market, and assessing sentiment and general risk aversion in these two provides you the tools to understand dangers or opportunities on the horizon.

CME – The importance of a cash-based futures market in BTC

Institutional traders strongly impact BTCs price discovery, as identified both by <u>Bitwise</u> and by <u>us</u>. However, many institutional traders have limitations regarding access to crypto markets or even related to holding BTC. CME provides the most accessible, most efficient access to crypto markets for those traders. CME also has the added caveat of a familiar clearinghouse structure, leading to fewer barriers to entry for crypto exposure for institutional traders.

We assess institutional sentiment by monitoring the futures basis and contract spreads between the front month (upcoming expiry) and the near month (next expiry). In general, a positive and high futures basis on CME indicates a positive sentiment, whereas a negative basis indicates the opposite. We include Binance's basis to compare offshore and CME premiums to highlight different sentiments between institutional traders and retail. While Binance have institutional traders, they also enable easy access to derivatives for retail, which may provide useful information ahead of periods of distress.

We monitor aggregated ProShares flows, meaning inflows and outflows to both ProShares' long BTC ETF (BITO) and short BTC ETF (BITI) on the CME page. In the chart, inflows to BITI will be calculated as a negative flow impact, while inflows to BITO will be calculated as a positive flow impact. The opposite is true for outflows from the ETFs mentioned above. ProShares are by far the largest U.S. BTC ETF provider, holding a substantial amount of BTC contracts on CME. Retail and institutions have access to BITO and BITI. Periods of strong aggregated flows to BITO may substantially impact CME's basis. An interesting scenario that has yet to emerge would be one scenario with neutral flows but a rising CME basis. In this scenario, one can assume that certain institutional players actively add long BTC exposure.

We further monitor CME's open interest and the contribution of ETFs to the open interest to assess the degree of activity in CME futures.

Perpetual swaps

Perpetual swaps are the most frequently traded derivative in crypto markets. It's an everlasting futures-like instrument, utilizing funding rates to secure that perp prices align with spot markets. There are certain intricate nuances to funding rates, for instance, varying funding intervals and varying neutral funding rate thresholds. In normal conditions, Binance and Bybit's funding rate sits at 001% every eight hours – meaning longs pay shorts a fee. This structural element in crypto derivatives may lead to a natural structural contango. They may be utilized for cash and carry strategies (albeit in a non-arbitrage fashion, assuming that funding rates will average around neutral terrain).

During roaring markets, funding rates tend to be pushed towards extreme highs due to enormous demand to go long, leading perps to trade at a substantial premium over spot. By assessing funding rates, you may be able to act on market moves and liquidation cascades prior to a liquidation cascade. Similarly, funding rates may sit in extremely negative terrain during bear markets, foreshadowing potential short squeezes.

We monitor open interest in perps to better gauge the risks of soaring volatility and market instability. We monitor open interest in notional value, i.e., in BTC, to have a clear eye on the relative leverage in the market. Currently, the open interest sits at all-time highs in notional value. This is a dangerous trend, and we view it as likely that this will generate a dramatic reaction when BTC breaks out of its prolonged consolidation. Cascading liquidations may occur in both directions, so the open interest is best used as a proxy for how volatile a spike may be.

Options

We monitor two options charts. The 25-delta skew, which is a metric comparing the implied volatility of a 25delta put option vs. a 25-delta call option, normalized by at the money implied volatility. Counter-intuitively, when the 25d skew is positive, traders are paying more for puts than calls and may be assessed as cautious/bearish behavior in the options market. The opposite is true when skews are negative. Skews trending in a certain direction may also elaborate on repositioning from options traders and is worth paying attention to. We show the 1-month skew for contracts expiring by the end of the month, and the 6-month skew, for contracts expiring half a year from now to assess differences in positioning across maturities.

The implied volatility illustrates options traders' forward-looking assessment of volatility – or the options pricing. Implied vols in BTC are rarely trailing below 60 for long, and this has previously been a good time to enter straddle strategies.

Disclaimer

- Ahead of the curve (the "Report") by K33 Research is a report focusing on cryptocurrencies, open blockchains and fintech. Information published in the Report aims to spread knowledge and summarise developments in the cryptocurrency market.
- The information contained in this Report, and any information linked through the items contained herein, is for informational purposes only and is not intended to provide sufficient information to form the basis for an investment decision nor the formation of an investment strategy.
- This Report shall not constitute and should not be construed as financial advice, a recommendation
 for entering into financial transactions/investments, or investment advice, or as a recommendation
 to engage in investment transactions. You should seek additional information regarding the merits
 and risks of investing in any cryptocurrency or digital asset before deciding to purchase or sell any
 such instruments.
- Cryptocurrencies and digital assets are speculative and highly volatile, can become illiquid at any time, and are for investors with a high risk tolerance. Investors in digital assets could lose the entire value of their investment.
- Information contained within the Report is based on sources considered to be reliable, but is not guaranteed to be accurate or complete. Any opinions or estimates expressed herein reflect a judgment made as of the date of publication and are subject to change without notice.
- The information contained in this Report may include or incorporate by reference forward-looking statements, which would include any statements that are not statements of historical fact. No representations or warranties are made as to the accuracy of these forward-looking statements. Any data, charts or analysis herein should not be taken as an indication or guarantee of any future performance.
- Neither Research nor K33 Operations AS provides tax, legal, investment, or accounting advice and this report should not be considered as such. This Report is not intended to provide, and should not be relied on for, tax, legal, investment or accounting advice. Tax laws and regulations are complex and subject to change. To understand the risks you are exposed to, we recommend that you perform your own analysis and seek advice from an independent and approved financial advisor, accountant and lawyer before deciding to take action.
- Neither K33 Research nor K33 Operations AS will have any liability whatsoever for any expenses, losses (both direct and indirect) or damages arising from, or in connection with, the use of information in this Report.
- The contents of this Report unless otherwise stated are the property of (and all copyright shall belong to) K33 Research and K33 Operations AS. You are prohibited from duplicating, abbreviating, distributing, replicating or circulating this Report or any part of it (including the text, any graphs, data or pictures contained within it) in any form without the prior written consent of K33 Research or K33.
- By accessing this Report you confirm you understand and are bound by the terms above.
- K33 Research is a department within K33 Operations AS, org. 994 608 673, and can be contacted at research@k33com or bendik@k33.com