# Ahead of the curve
## Market Update



**Bendik Schei**
Head of Research
bendik@arcane.no
+47 943 09 160

**Vetle Lunde**
Senior Analyst
vetle@arcane.no
+47 416 07 190

**Choppy but overall flat week**
The past week has seen the crypto market consolidate after a remarkable period of sustained strength. BTC trades flat for the week but pushed higher this Sunday before erasing the entire upside on Monday, differing from the two previous weekend rallies, which have yet to be retraced.

The strong momentum in BTC has seen a gradual decline. The daily RSI has fallen below 70, while this weekend showed tendencies of increased activity from perpetual swap long traders who got washed out as BTC retraced its weekend gains on Monday. This observation differs from past observations of shorts being chased and could suggest that the dynamic in the market is changing (page 6) in support of stabilizing momentum onwards. Nonetheless, speculative institutional participation grew further this week, accompanied by positive futures premiums (page 5), which should be viewed as a positive near-term development.

**Market braced for a 25bps hike on Wednesday**
A busy macro week lies ahead, with interest rate decisions from the ECB, the Bank of England, and the Federal Reserve. Fed funds hikes have been a constant source of market volatility throughout 2022, and traders should brace for volatile hours during this Wednesday's FOMC press conference.

Deflationary economic data in January has caused optimism in the market, but a pivot reigns unlikely in the near term. Earlier in January, U.S. CPI data came in at -0.1% MoM, while the core CPI came in at 0.3%. Further evidence of receding inflation came in during the PPI release of -0.5%, well below expectations.

Currently, the market is unanimously aligned in expecting a 25bps FOMC hike and is more uncertain about the dot plot onwards. Due to a relatively strong market recovery, Chair Powell may take the advantage to maintain hawkish restrictive undertones, emphasizing the importance of incoming economic data.

**FOMC volatility trending lower**
We observe that BTC's price action during the two most recent FOMC press conferences has been far less volatile than the norm during the most aggressive hiking cycle from March to September 2022. The chart below illustrates the rolling minutely volatility of BTC amid prior FOMC meetings.

Nonetheless, the FED's path remains unclear, with conflicting views on the dot plot. Jerome Powell's guidance is likely to offer volatile conditions, and traders should expect a volatile Wednesday and FED's forecast onwards to be important to the near-term directional price path.

**First sign of life in BTC ETPs since June**
January has seen net BTC ETP inflows amounting to 9,131 BTC. This is the biggest MoM change in ETPs' BTC exposure since June 2022, where ETPs experienced a net outflow of 20,124 BTC due to a massive redemption in Purpose's BTC ETF.

## By the numbers

**BTCUSD** $22,896
7d: **0%**
30d: **38%**

**ETHUSD** $1,572
7d: **-3%**
30d: **31%**

**Open Interest (BTC futures and perps)**
$10bn
435,000 BTC (**3.8%** last seven days)

**Average daily BTC spot volume**
$11.2bn (**-5%** last seven days)

**BTC 90-d correlations** (weekly change included)

| ETH | Gold | S&P 500 | DXY |
|---|---|---|---|
| 0.94 (0.02) | 0.23 (-0.02) | 0.45(0.00) | -0.36 (-0.01) |

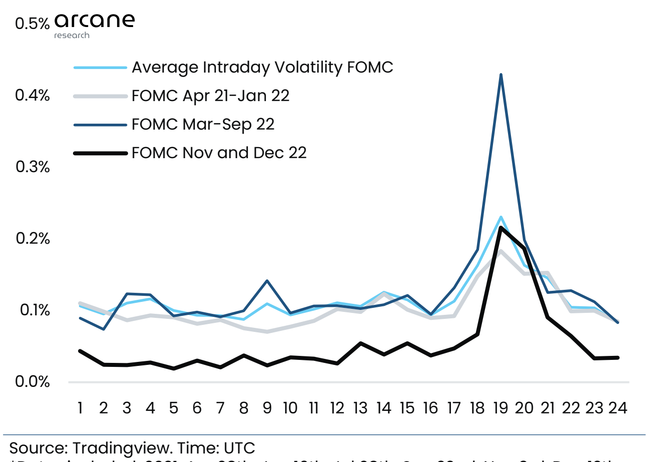
**Percentage of Total Market Capitalization**
Weekly change in percentage points

| BTC | ETH | Stablecoins | Rest |
|---|---|---|---|
| 42.4% (0.4%) | 18.4% (-0.4%) | 12.1% (0.1%) | 27.1% (-0.1%) |

**Last week of top 50 by market cap**

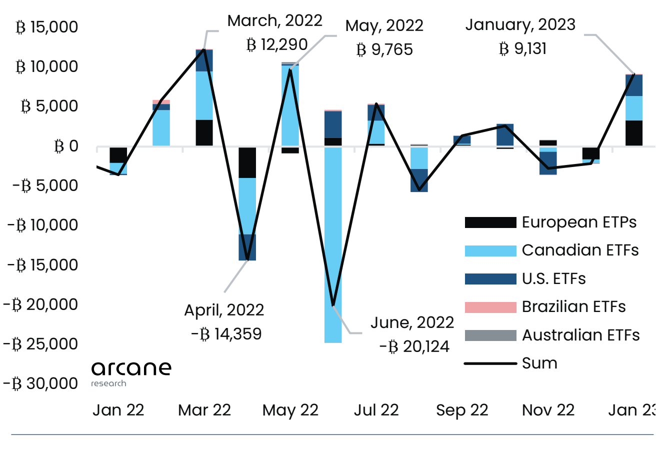
| | Ticker | 7d | YTD |
|---|---|---|---|
| **Gainers** | | | |
| 1 | APTOS | 28% | 374% |
| 2 | FTM | 20% | 140% |
| 3 | MATIC | 9% | 44% |
| **Losers** | | | |
| 1 | LIDO | -18% | 98% |
| 2 | FLOW | -16% | 53% |
| 3 | AXS | -14% | 71% |

**Figure 1: Bitcoin: 60 min rolling volatility during FOMC meetings***




Source: Tradingview. Time: UTC
*Dates included: 2021: Apr 28th, Jun 16th, Jul 28th, Sep 22nd, Nov 3rd, Dec 12th. 2022: Jan 26th, Mar 16th, May 4th, Jun 15th, Jul 27th, Sep 21st, Nov 2nd, Dec 14th

**Figure 2: Monthly Flows to BTC ETPs**




Source: Bytetree, VanEck, Proshares, Hashdex, StatusInvest, ETF Securities

# Honey badger don't care
## January Update

**Digital Assets**

February Outlook

**Vetle Lunde**
Senior Analyst
vetle@arcane.no
+47 416 07 190

Short-term, I am bearish as the crypto market strength seems over-extended across multiple metrics, while a FED pivot still seems far away. Long-term, I am steadfastly bullish as BTC reclaims pre-FTX trauma levels.

A month-long echo has roared in the market. BTC is about to end January up 39%, its strongest month since October 2021. January will be remembered as the month where shorts and those underexposed bled as BTC ripped beyond pre-FTX collapse levels. Appreciate BTC's ability to weather storms.

### Short-term I am a bear sitting on my hands

A combination of slowing momentum, strong technical resistance, and expectations of a hawkish FOMC leads me to expect a poor February in the market. However, I am not outright bearish due to convincing developments on the only regulated BTC futures market. I express my view by reducing small-cap exposure.

Momentum is falling, and the constant short squeezes experienced throughout January have cleansed derivatives of vast amounts of leverage and fuel for further upside. Additionally, brief tendencies over the weekend indicated that long traders were once again pushing the buy button with the leverage bar dragged toward the double-digit x's. This is not a welcoming signal for BTC to push higher.

I believe tomorrow's FOMC will negatively affect bitcoin's momentum in the coming weeks. The market is overly optimistic regarding a swift FED pivot. Like the market, I expect a 25bps hike on Wednesday. Still, I also expect JPow to use the opportunity provided by the strong markets in January to be hawkish and maintain a steadfast focus on the war on inflation. A pivot is still off the table, maintained QT and high rates throughout the year will be the message, and that message will not be adjusted until the FED's hands inevitably get forced by some kind of seismic disturbance.

Technical resistance also limits the upside. Both $25,000 and $28,000 are hefty resistance areas, and BTC is currently finding itself straight in the middle of the "in-between devastating industry collapses range" from late June until early November. The odds are high that we will be reaccustomed to this bland trading range in the foreseeable future.

CME's surging open interest, substantial contango, and yield buoyancy disrupt my bearish outlook. A positive trend to the CME basis toppled with a growing CME dominance in the market makes it hard to be bearish to the extent that I sell at current prices. The current tendencies at CME are rare, and one should always pay attention to and respect speculative institutional flows.

In my view, traders with small-cap exposure will benefit from rotating into the majors. Ethereum is destined to face some interesting months as the Shanghai upgrade is nearing, which could reflect well on tokens related to liquid staking, such as LIDO. Coins such as SOL (142% YTD), AVAX (82% YTD), FTM (143%), and particularly APT (382% YTD, highest alt-layer 1 FDV in the market) have seen an incredible performance in January, predominantly pushed by shorts getting squeezed. Ahead of a potentially slow February, the timing could be ripe for a portfolio rebalancing into quality.

### But long term my faith in the honey badger only grows

Since October 1st, Nasdaq has seen a 6% upside, while BTC has seen gains of 18% like nothing happened. Need I remind you what happened in November? Bitcoin has already more than recovered from the sorrowing FTX trauma.

Correlations between BTC and U.S. equities will trend lower in the coming months, bar the odd highly important macro catalysts. As inflation focus gradually develops into recession fears, S&P 500, Nasdaq, and earnings will matter less. Anticipated changes to liquidity conditions and the cost of the U.S. Dollar (Interest rates) caused the high correlations of 2022.

Since July 1st, Bitcoin has seen gains of 15%, and Nasdaq has seen a 3% upside. While the crypto complex has been shattered as behemoths such as Celsius, BlockFi, Genesis, FTX, Voyager, Core Scientific, and more have been busy filing Chapter 11 bankruptcies, BTC has quietly stabilized and outperformed other assets.

Blackrock, Sequoia, the Ontario Teachers' Pension Plan, and more have eaten losses based on the expression "in a gold rush, you should sell shovels", with the crypto analogy being "institutions seeking to invest in crypto infrastructure". What if the long-term sound choice is to add direct exposure to the mythical orange coin?

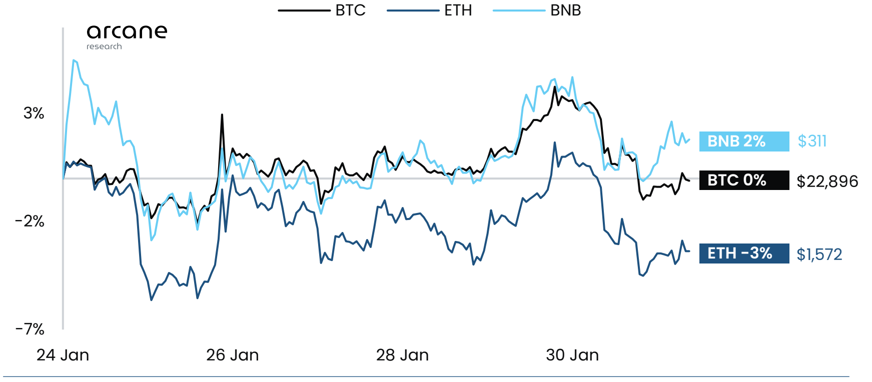
# Spot Market

**Choppy but overall flat week**
The past week has seen the crypto market consolidate after a remarkable period of sustained strength. BTC trades flat for the week but pushed higher this Sunday before erasing the entire upside on Monday, differing from the two previous weekend rallies, which have yet to be retraced.

The strong momentum in BTC has seen a gradual decline. The daily RSI has fallen below 70, while this weekend showed tendencies of increased activity from perpetual swap long traders who got washed out as BTC retraced its weekend gains on Monday. This observation differs from past observations of shorts being chased and could suggest that the dynamic in the market is changing (page 6) in support of stabilizing momentum onwards. Nonetheless, speculative institutional participation grew further this week, accompanied by positive futures premiums (page 5), which should be viewed as a positive near-term development.

A hefty macro week awaits, with multiple interest rate decisions in addition to earnings reports from several tech giants. The FOMC press conference on Wednesday is this week's most important event, and we anticipate the press conference to have a prolonged directional impact on crypto market performance. The market is unanimously positioned for a 25bps hike but has differing expectations regarding when the hiking cycle will reach a plateau, as we elaborate on page 7.

**Figure 3: Top 3 Market Cap, Last Week**

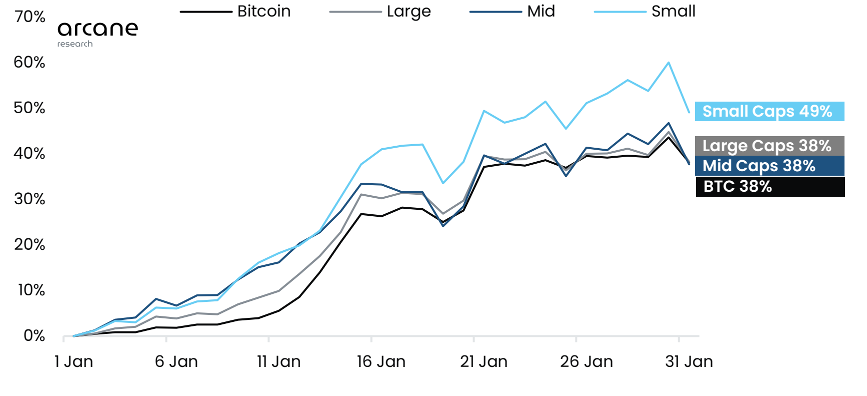



Source: Tradingview, (Coinbase, Binance U.S.)

**Stalling momentum**
Small Caps gains peaked at 60% YTD on Sunday but saw a significant push lower on Monday, still seeing 49% over the past 30 days, outperforming all other indices, which have tracked bitcoin closely throughout January.

The Small Caps push and retracement could suggest the market is over-heated in the short term.

**Figure 4: 30d Performance of Market Cap Weighted Indexes**




Source: Bletchley Indexes, Tradingview (Coinbase)

## Headlines last week

Bankrupt crypto lender Genesis optimistic it can resolve creditor disputes

EU banks face stricter rules for crypto holdings

Moody's developing stablecoin scoring system: Bloomberg

SEC bats down ARK's and 21Shares' second bitcoin ETF proposal

Celsius failed to report $800 million in losses as CFO flagged 'possibly illegal' behavior

FTX-linked Alameda Research sues Voyager Digital for over $445M

## Calendar

Wednesday, February 1
- FOMC Press Conference (Est: 25bps)
- EU CPI (Est: 9.7% YoY)
- Meta Earnings

Thursday, February 2
- BoE Interest Rate Decision (Est: 50bps)
- ECB Interest Rate Decision (Est: 50bps)
- MicroStrategy Earnings
- Apple Earnings
- Alphabet Earnings
- Microsoft Earnings

Friday, February 3
- U.S. Non-farm Payrolls (Est: 185k)
- U.S. Unemployment rate (Est 3.6%)

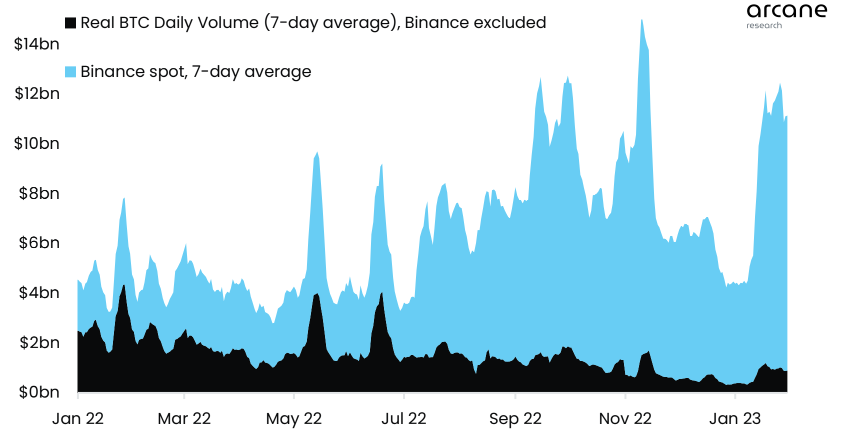
# Spot Market

## Fear and Greed

Now: 51 (Neutral)
Last week: 52 (Neutral)
Last month: 26 (Fear)

**Volumes still above $10bn**
Spot volumes have stabilized above $10bn in the past three weeks, and we note no major changes from last week. Typically, volumes fall as BTC prices stabilize, but last week marks an exception from the rule as prices mostly ranged in a tight range near $23,000 while volumes remained elevated.

**Figure 5: Real BTCUSD Daily Volume* (7-day average)**



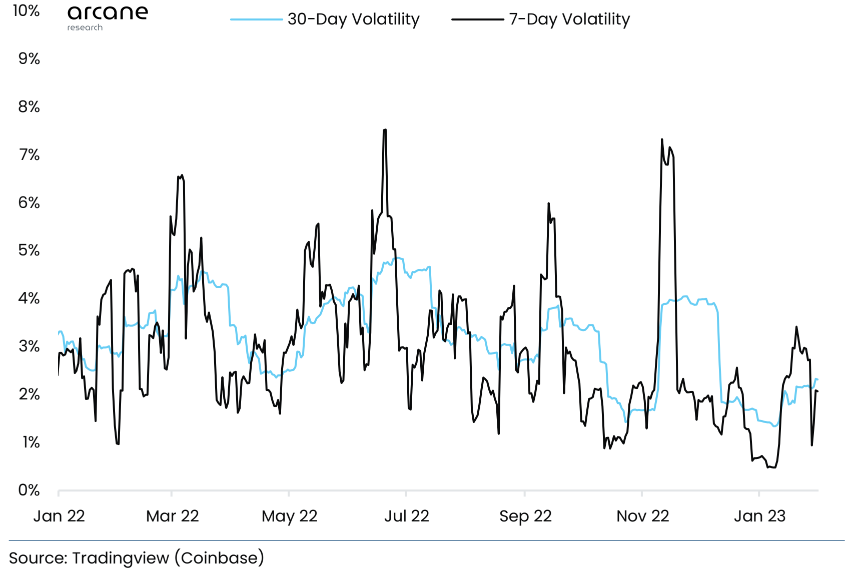

Source: Tradingview *Includes Bitwise 10 exchanges

**A weekend of wicks sends volatility higher**
For the majority of the past week, BTC oscillated in a tight trading range at $23,000, leading the 7-day volatility to fall briefly below 1% on Friday. However, also this weekend saw volatility in BTC, albeit originating on a Sunday, rather than a Friday, in addition to being fully retraced on Monday, unlike the two previous weekend rallies.

BTC saw a strong 3.1% push higher on Sunday before retracing the upside on Monday, causing the 7-day volatility to push above 2%, and volatility remains elevated.

As highlighted in the previous page and in-depth on page 7, this week offers new potential volatility catalysts, with Wednesday's FOMC being the most potent catalyst.

**Figure 6: BTC-USD Volatility**

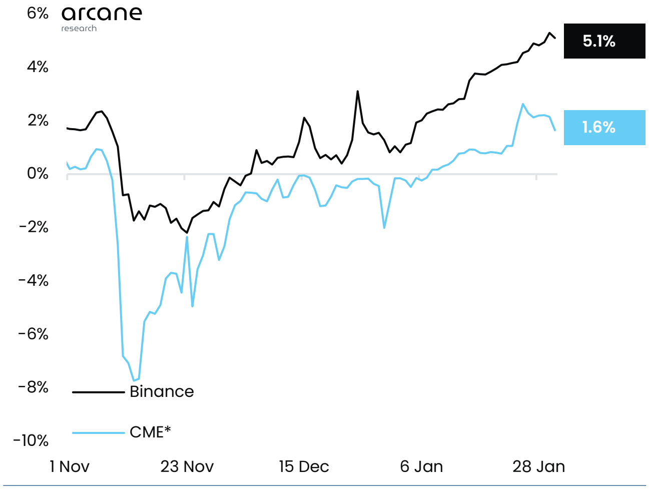



Source: Tradingview (Coinbase)

# Derivatives

## CME, Futures and ETFs

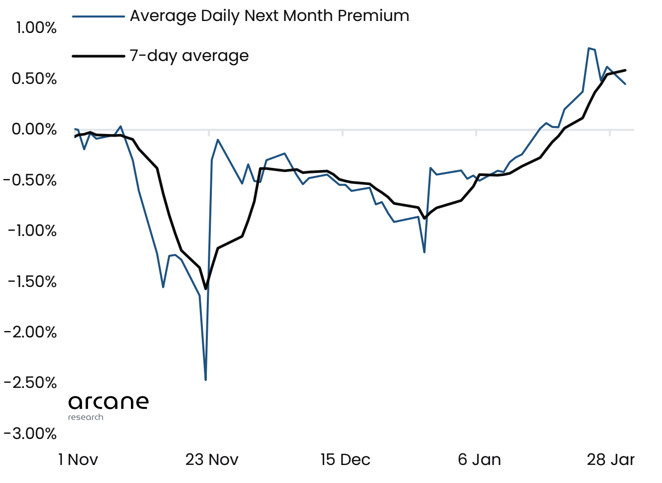
**Figure 7: Bitcoin Futures Annualized Rolling 3-Month Basis**




Source: Skew, Laevitas, Tradingview, CME
*Closed Saturday - Sunday

**CME futures basis at highest level since August**
CME's futures basis climbed higher last week and peaked at 2.2% on Thursday before declining to 1.6% on Monday. This is the highest 3mth annualized basis seen on CME since August, and it's accompanied by growing open interest and direct market activity. The growing direct participation and positive trend to the basis suggest a positive bias from institutional speculators.

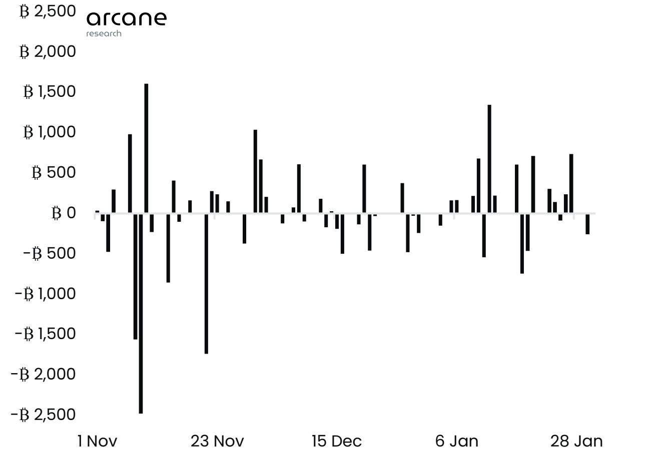
**Figure 8: CME BTC Futures: Average Daily Next Month Premium**




Source: Tradingview

**Largest next month premium on CME since Nov 2021**
The term structure in CME's BTC futures has entered a sharp contango. Currently, the next-month contract trade at a 0.5% premium to the front-month contract after peaking at 1% on Wednesday. The current next-month premium is the highest recorded next-month premium since November 2021. The observed contango further suggests a positive institutional sentiment in bitcoin.

**Figure 9: ProShares: Net Flow – BTC Equivalent**

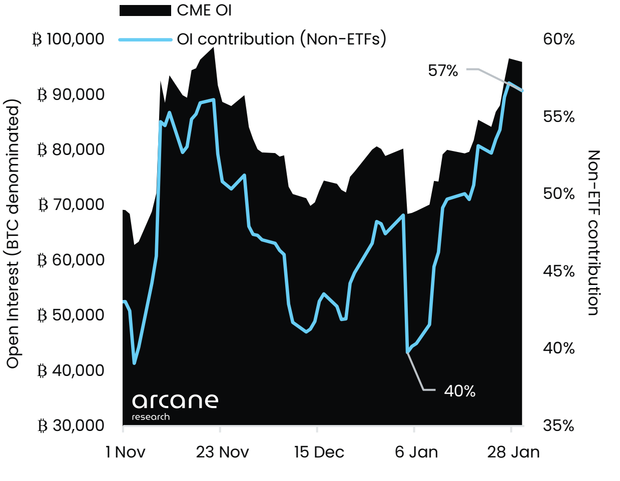



Source: ProShares

**Positive flows to ProShares' long BTC ETF**
BITO, ProShares' long BTC ETF, has seen its BTC exposure grow to a new all-time high of 34,690 BTC after strong inflows over the past week, as we elaborate on page 8.

ProShares' short ETF BITI saw slight but continuous inflows over the past week as well, offsetting some of the net flow effects from BITO, as the two funds combined have seen positive flows of 760 BTC over the past seven days.

**Figure 10: CME BTC Futures: Open Interest**



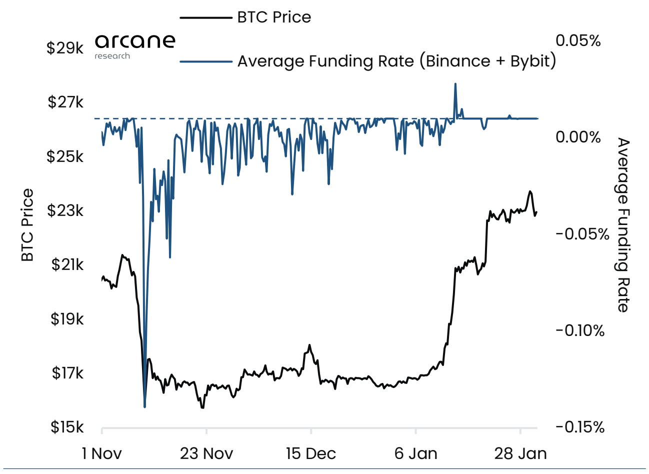

Source: CME Group, ProShares, Valkyrie, VanEck

**CME open interest closing in on ATHs**
CME's OI climbed further over the past week, with direct market participants being the predominant source of the growth as the Non-ETF contribution to the OI has grown further from 53% to 57%.

The strong institutional presence in BTC futures, alongside positive developments in the basis and contango, is a promising signal for BTC. CME is an important source in BTC's price discovery and led the market in both October 2020 and April 2021, two periods which marked a substantial trend shift in BTC.

# Derivatives
## Perpetual Swaps and Options

**Figure 11: Bitcoin Perpetuals: Funding Rates vs BTC Price**

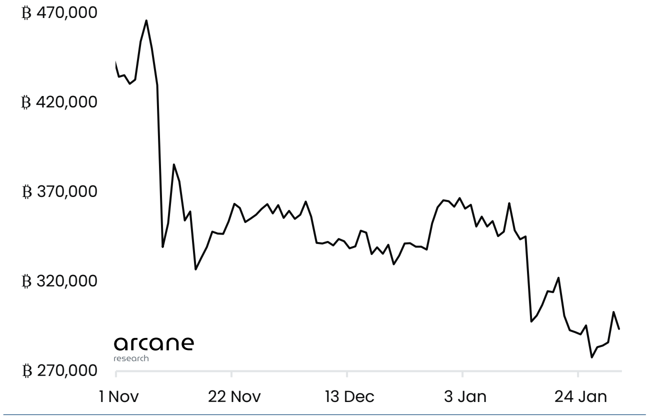



Source: Bybit, Binance, Tradingview (Coinbase)

**Two weeks of neutral funding rates**
Perp sentiment remains balanced as funding rates reign flat. Funding rates have been at neutral levels of 0.01% for the last two weeks on both Binance and Bybit. The last time we saw a similarly lengthy neutral funding rate environment was from late December 2021 to early January 2022.

While funding rates stay idle, trading volumes mirror those of the spot market, as the market activity remains relatively high.

**Figure 12: Bitcoin Perpetuals: Open Interest**




Source: Laevitas

**First observations of longs being chased**
Open interest in perps stays muted at 290,000 BTC. However, this weekend, OI increased amidst BTC's push toward $24,000 and fell as BTC retraced towards $22,500.

This is a significant deviation from previous observations in January and suggests a changing dynamic. Shorts are no longer chasing higher prices, while longs are eyeing further upside. This could indicate stalling momentum onward.

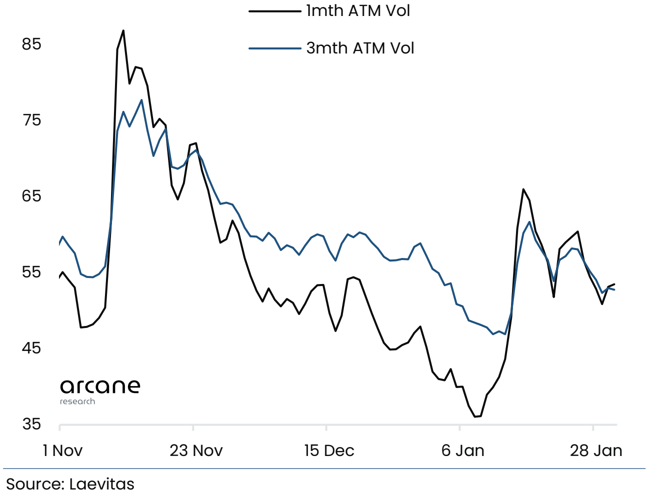
**Figure 13: BTC Options - 25D Skew (1mth + 6mth)**


Source: Laevitas

**Skews neutralizing**
On Tuesday, options skew across tenors flipped slightly into positive terrain again. The short-term options flows indicate that options traders are once again focused on downside protection. This could be caused by stagnating momentum, near-term catalysts with the FOMC, and the tendency of changing behavioral patterns in perps, as noted above.

However, options skews are currently neutral, indicative of a balanced risk appetite in options, in line with the neutral state of funding rates in perps.

**Figure 14: BTC Options – Implied Volatility**




Source: Laevitas

**Implied volatility back to the lower 50s**
As bitcoin has stabilized and traded in a predominantly flat state over the past seven days oscillating near $23,000, implied vols have trended lower.

Currently, implied volatility sits in the lower 50s, even for the longer tenors, on par with levels from early November as the options market is pricing in slower markets ahead.

# A deeper dive

## 25bps this FOMC meeting?

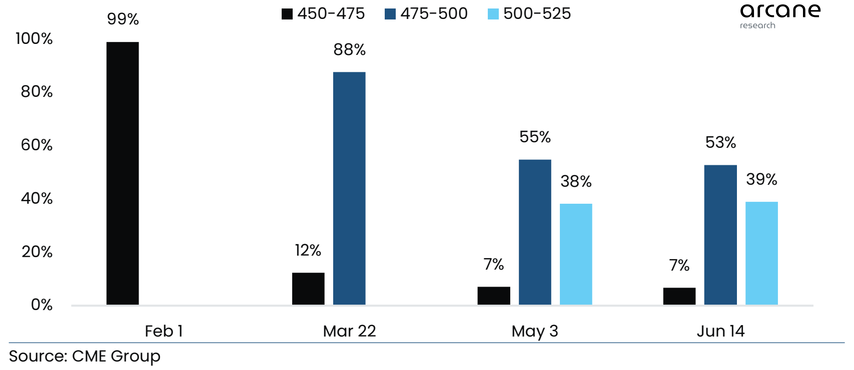
A busy macro week lies ahead, with interest rate decisions from the ECB, the Bank of England, and the Federal Reserve. Fed funds hikes have been a constant source of market volatility throughout 2022, and traders should brace for volatile hours during this Wednesday's FOMC press conference.

Deflationary economic data in January has caused optimism in the market, but a pivot reigns unlikely in the near term. Earlier in January, U.S. CPI data came in at -0.1% MoM, while the core CPI came in at 0.3%. Further evidence of receding inflation came in during the PPI release of -0.5%, well below expectations.

Currently, the market is unanimously aligned in expecting a 25bps FOMC hike and is more uncertain about the dot plot onwards. Due to a relatively strong market recovery, Chair Powell may take the advantage to maintain hawkish restrictive undertones, emphasizing the importance of incoming economic data.

The chart below depicts the current implied odds for the FED's fund rate onwards. The market expects a 25bps hike on Wednesday and another 25bps hike to 475bps on March 22. The market is more conflicted on the trajectory onwards following March. Currently, zero adjustments during the May 3 and June 14 FOMC meetings are priced as the most likely outcome, but a further hike of 25bps remains within the realm of possibility.

**Figure 15: Target Rate Probabilities, Feds Fund Rate**



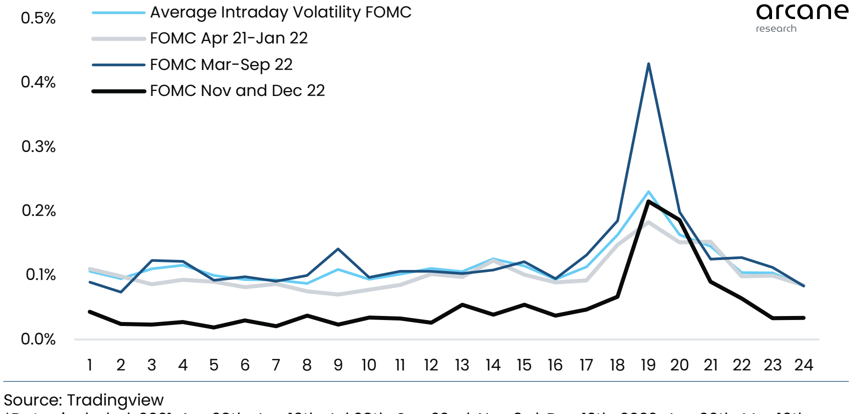

Source: CME Group

**FOMC volatility trending lower**

We observe that BTC's price action during the two most recent FOMC press conferences has been far less volatile than the norm during the most aggressive hiking cycle from March to September 2022. The chart below illustrates the rolling minutely volatility of BTC amid prior FOMC meetings. The black line highlights that BTC's reaction to the November and December FOMC press conferences was far softer than during the preceding FOMC press conferences. This could suggest that the trend of massive FOMC-induced volatility in BTC is receding.

Nonetheless, the FED's path remains unclear, with conflicting views on the dot plot. Jerome Powell's guidance is likely to offer volatile conditions, and traders should expect a volatile Wednesday and FED's forecast onwards to be important to the near-term directional price path.

**Figure 16: Bitcoin: 60 min rolling volatility during FOMC meetings* (UTC time)**




Source: Tradingview

*Dates included: 2021: Apr 28th, Jun 16th, Jul 28th, Sep 22nd, Nov 3rd, Dec 12th. 2022: Jan 26th, Mar 16th, May 4th, Jun 15th, Jul 27th, Sep 21st, Nov 2nd, Dec 14th

# A deeper dive

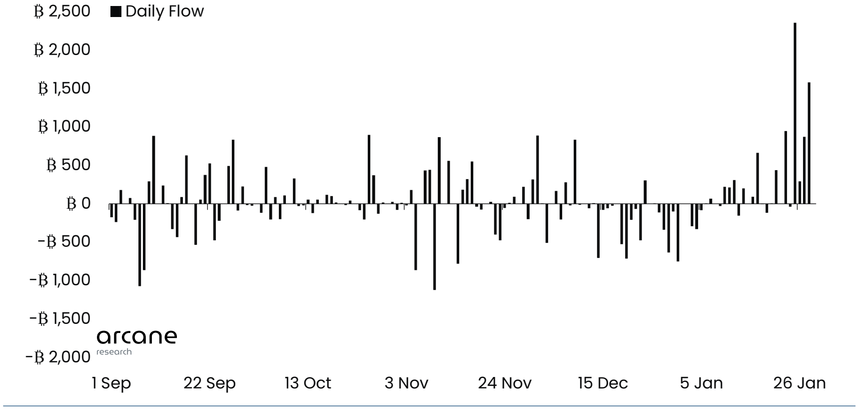
## BTC ETPs see growing inflows

**Strong ETP flows**
Demand for bitcoin exposure through investment vehicles has picked up after a six-month long hiatus. The past week saw inflows amounting to 6,031 BTC in BTC ETPs, with European, U.S., and Canadian ETFs seeing the most substantial inflows.

BITO's strong inflows last week caused its Bitcoin exposure to push to a new all-time high. BITO's flows are accompanied by increasing activity in CME futures by direct market participants as CME's open interest is pushing towards new all-time highs, as explained on page 6.

The SEC has yet to approve any spot ETFs, and Grayscale is pushing for a change. Grayscale's lawsuit against the SEC has progressed in the past weeks as a date for the oral hearing has been scheduled for March 7th. Grayscale view the denial of spot ETFs as arbitrary and capricious in light of the approval of various futures-based ETFs, which also derive their value from the BTC spot markets. Still, the SEC has maintained a steadfast view against spot ETFs. Grayscale currently expects the final verdict to come this fall.

**Figure 17: Daily Flows (BTC ETPs)**

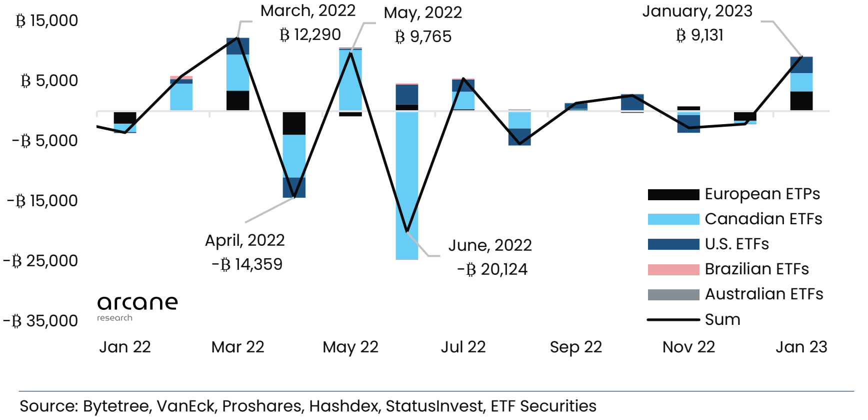



Source: Bytetree

**First sign of life in ETPs since June**
January has seen net BTC ETP inflows amounting to 9,131 BTC. This is the biggest MoM change in ETPs' BTC exposure since June 2022, where ETPs experienced a net outflow of 20,124 BTC due to a massive redemption in Purpose's BTC ETF.

European ETPs currently hold 96,283 BTC (52% of the total market), Canadian ETFs hold 52,785 BTC (29% of the total market), while U.S. futures-based ETFs hold a net exposure (long ETFs minus short ETFs) of 32,658 BTC (representing 17% of the total market). Brazilian and Australian ETFs have stagnated over the last six months and have yet to experience any significant inflows.

**Figure 18: Monthly Flows to BTC ETPs**

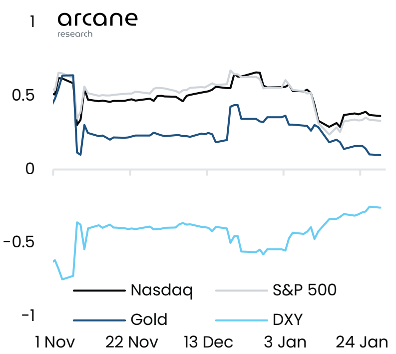



Source: Bytetree, VanEck, Proshares, Hashdex, StatusInvest, ETF Securities

# Market Related Charts

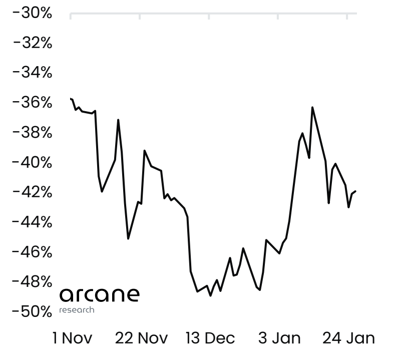
Data updated Monday Jan 23, 2023

**Figure 20: BTC 30-d correlations***



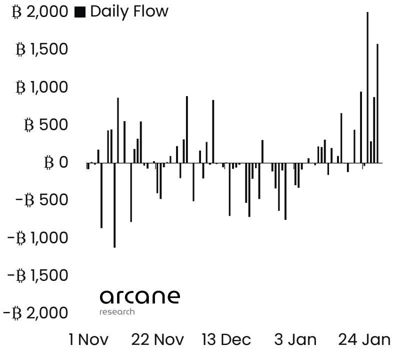

Source: Tradingview *Pearson

**Figure 21: Grayscale Premium/Discount**




Source: Ycharts

**Figure 22: Daily Flows (BTC ETFs)**




Source: Bytetree

**Figure 23: BTC Dominance**

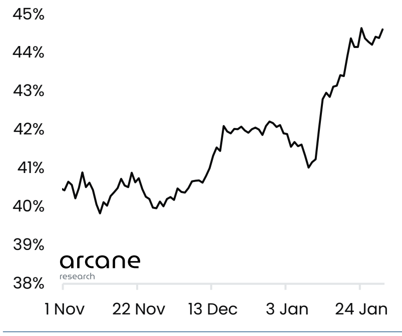



**Figure 24: BTC + Stables Dominance**

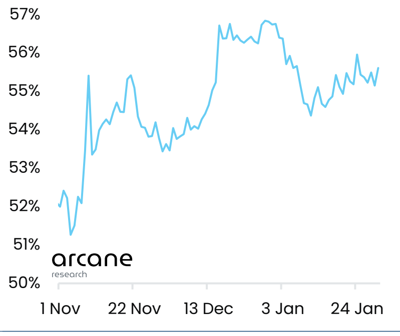
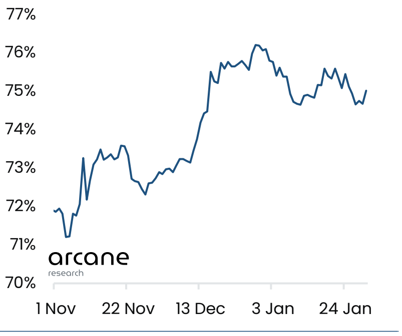
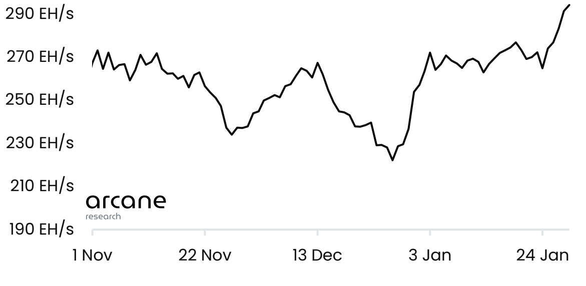



**Figure 25: BTC + Stables + ETH Dominance**



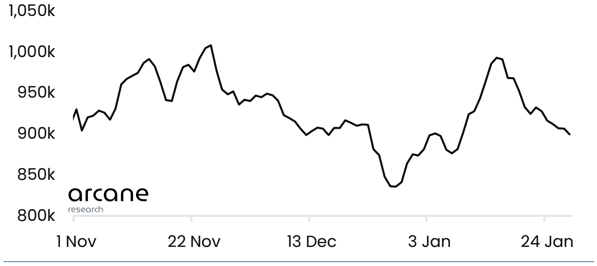

Source: Tradingview

**Figure 26: Bitcoin Hashrate (7-day average)**




Source: Blockchain.com

**Figure 27: Active Addresses (7-day average)**




Source: Coinmetrics

**Figure 28: On-chain statistics**

| Powered by BYTETREE | 01/29/2023 | 7d Change |
|---|---|---|
| Daily Miner Revenues | $22,934,768 | 15.21% |
| Fees per day | $299,905 | -8.50% |
| Fees % Revenues | 1.31% | -0.34% |
| Daily TX Volume ($M) | $3,264 | -9.48% |
| Transactions per day | 288,182 | -1.35% |
| Avg TX value $ | $11,324.57 | -8.24% |
| # Blocks per hour | 6.54 | 8.82% |
| Avg. # TX per block | 1837 | -1.35% |

Source: Bytetree

# 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 this link.

**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 "in-organic" 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 Bitwise and by us. 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 0.01% 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 25-delta 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.

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- Arcane Research is a department within Arcane Crypto AS, org. 994 608 673, and can be contacted at research@arcane.no or bendik@arcane.no.