Ahead of the curve
Market Update

Digital Assets

Signals from the market

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Awakening markets?
A green week following a massive short squeeze. Last week saw the largest short liquidation volume in crypto since July 26, 2021, contributing to pushing BTC up 6%. ETH saw more substantial gains of 18%, driven by a heftier short squeeze. Throughout the last week, BNB has seen a more stable uptrend, possibly led by more BNB enthusiasm related to Binance's role in Musk's Twitter takeover.

Traders should prepare for volatility in the coming weeks, as the event calendar is crowded with potentially market-moving events. Wednesday's FOMC press conference (see page 9) is this week's key event, but company earnings (MicroStrategy Nov 1, Coinbase Nov 3), economic data, and U.S. mid-terms may also lead markets to move.

Relative crypto strength since FOMC meeting
Wednesday's FOMC press conference will likely lead to volatility in a highly correlated environment between crypto and U.S. equities. Currently, the market is pricing in an 86% probability of a 75bps hike versus a 14% probability of a 50bps hike. The odds for a 50bps hike have increased materially in the last week as chatter about a FED pivot has strengthened. A 75bps hike is still the most likely outcome, but due to rising expectations of a 50bps hike, a 75bps hike is poised to reflect negatively on the market.

Crypto has shown strong relative strength over equities since the last FOMC. ETH and BTC saw massive short-lived selling pressure immediately after the FOMC press conference but recovered comfortably, seeing strong positive returns since the last FOMC. Gold and equity indexes, on the other hand, are in the red. This is a positive sign of relative strength from crypto, and we note slight signs of declining correlations (figure 19, page 11).

FOMCs tend to lead to elevated correlations across asset classes, which will likely repeat this Wednesday and traders should prepare for volatility, with FOMC press conferences being notorious in leading to volatile markets, as illustrated in figure 1.

Massive short squeeze, muted market impact
Last week, crypto derivatives recorded the largest short squeeze since July 26, 2021. In BTC derivatives alone, $330m worth of shorts were liquidated on both October 25 and October 26. The crypto market as a whole experienced $1.35bn worth of liquidations these days, with ETH perps seeing exceptionally high liquidation volumes on FTX.

This squeeze has had a small impact on markets compared to the July 26, 2021, squeeze. July 26 saw a daily high-low variation of 15% as markets hastily moved up, whereas last week's moves saw daily high-low variations of 5% and 6%, respectively. Further, momentum has stopped, indicating that traders should brace for longer consolidation if the FOMC does not provide an unlikely surprise pivot.

The short squeeze has seemingly had a lackluster momentum impact on markets as BTC still oscillates well within its consolidation range. This could indicate a) an influx of sellers as BTC trades above 20k and/or b) FTX's liquidation engine impact.

By the numbers

BTCUSD $20,600
7d: **2%**
30d: **8%**

ETHUSD $1,590
7d: **9%**
30d: **25%**

Open Interest (BTC futures and perps)
$11.9bn
578,000 BTC (**-9.4%** last seven days)

Average daily BTC spot volume
$10.6bn (**+46%** last seven days)

BTC 90-d correlations (weekly change included)

ETH	Gold	S&P 500	DXY
0.80 (-0.00)	0.31 (0.04)	0.54 (0.00)	-0.46 (-0.02)

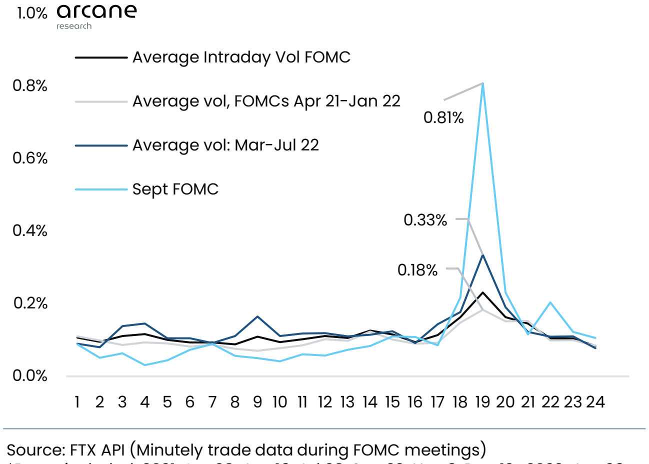
Percentage of Total Market Capitalization
Weekly change in percentage points

BTC	ETH	Stablecoins	Rest
38.6% (-0.7%)	19% (1.3%)	13.1 % (-1.3%)	29.2% (0.6%)

Last week of top 50 by market cap

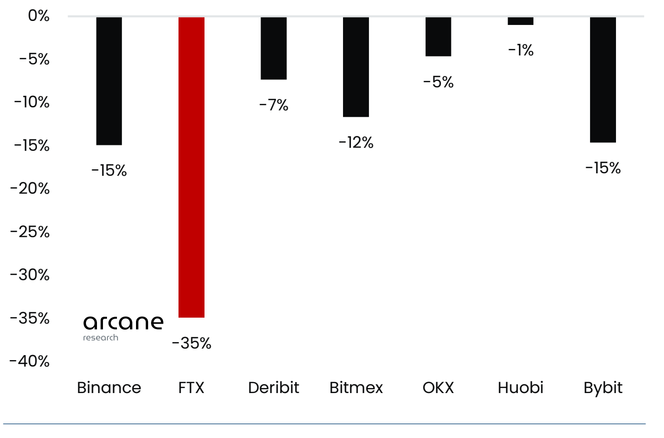
	Ticker	7d	YTD
Gainers			
1	DOGE	145%	-19%
2	SHIB	31%	-62%
3	ATOM	23%	-61%
Losers			
1	Quant	-7%	-8%
2	AAVE	1%	-68%
3	MATIC	1%	-65%

Figure 1: BTC 60 min Rolling Volatility on FOMC day* (Time zone: CET)



Source: FTX API (Minutely trade data during FOMC meetings)
*Dates included: 2021: Apr 28, Jun 16, Jul 28, Sep 22, Nov 3, Dec 12. 2022: Jan 26, Mar 16, May 4, Jun 15, Jul 27, Sep 21.

Figure 2: OI BTC Perps % Change from Oct 25, 16:30 CET



Source: Laevitas
Period: October 25, 16:30 CET – October 31, 16:30 CET

View 100% unchanged
October Update

Digital Assets

October Market Opinion

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October is done and dusted, and crypto markets still remain largely idle in the burdensome depths of the crypto credit crisis over the summer. Price-wise, we've seen no material changes from last month, but under the hood, the market is a-changing.

Short term

Bitcoin is currently priced attractively, but the trading range holds firm. In the current regime, the most prudent approach is to participate through spot market purchases.

Leverage is declining in force, but the trading range holds firm, and leverage is still very high, leading the potential of ripping squeezes to remain elevated. With these tendencies in mind, traders should still avoid leverage and prioritize incentivized dollar cost averaging at attractive prices.

Shorts are on the losing edge of the momentum, leading to the largest short squeeze since July 2021. However, the recent squeeze has had a minimal impact on prices. I believe this is caused by a mixture of more efficient liquidation engines on FTX and a relatively high willingness to sell BTC at prices above $20k. In notional sums, leverage is still at levels twice as high as those seen throughout 2021, and I would still advise prudency related to leveraged involvement in crypto at the moment.

It's still time to straddle up. Volatility is uniquely low in BTC at the moment, on par with the volatility seen in U.S. equities, and options are getting cheaper every day due to backward-looking volatility expectations among options traders. Far-dated expiries in BTC options are currently trading at 2-year low IVs. I expect volatility to erupt sooner rather than later, and I firmly believe straddle strategies are priced attractively now.

Prepare for shaky markets in early November, as the event calendar is enormously busy in the first half of the month. Tomorrow comes the first major catalyst with another FOMC press conference, which has become growingly volatile as the tightening cycle prevails. Apart from the FOMC, non-farm payrolls, U.S. mid-term elections, and Q3 earnings from crypto behemoths MicroStrategy, Coinbase, Block, and Robinhood will all occur within the first eight days of November.

Speaking of MicroStrategy, I still expect MicroStrategy's BTC purchases to begin in early to mid-November. I will be surprised if there are no MicroStrategy announcements by the end of November. MicroStrategy purchases could lead BTC to pop and later drop, moisturized by animal spirits and a sudden significant bidder.

Medium-term

My directional medium-term outlook is currently ambiguous, as I expect the environment to be extremely dependent on U.S. monetary policy.

Two scenarios, dependent on the coming (and the next) FOMC, will impact my medium-term view..

Scenario 1: Jerome Powell remains astute in combatting inflation and prepares the market for further hikes.

This is, in my opinion, the most plausible scenario. In this environment, I expect correlations between BTC and other asset classes to remain elevated and the now 4.5-month-long trading range to hold firm, with dampened activity, leading to a longer-lasting opportune environment to stack sats.

Scenario 2: Jerome Powell provides subtle pivot hints.

In this scenario, I see the correlated market environment softening. Last week, we saw how unique structural crypto-related market activity caused correlations to decline through a substantial short squeeze. Pivot anticipations will lead to similar reactions and revitalize BTC's digital gold narrative.

Long-term

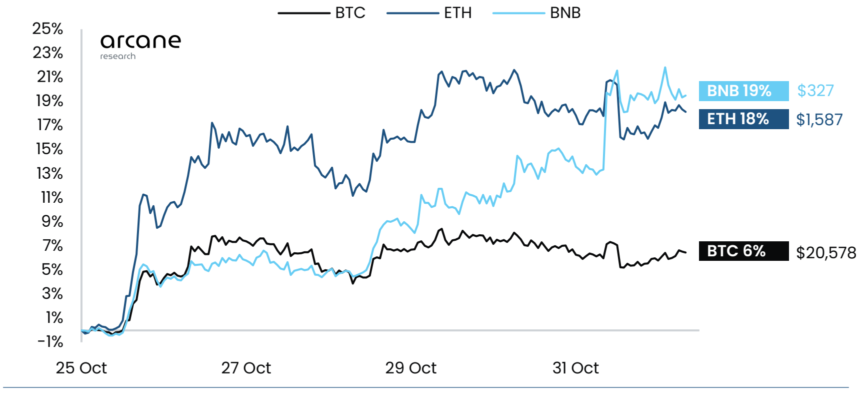
BTC's long-term adoption prospects still look very good, and BTC at $20k seems like a bargain through longer lenses. We still see increased institutional interest in crypto, even though we're still battling bear market depths. A recent Fidelity survey shows that the number of institutional investors that view digital assets as something that should be a part of investment portfolios grew in 2022, and I expect increased institutional market participation as crypto gets a clearer regulatory framework in the EU and U.S.

Spot Market

Awakening markets?
A green week following a massive short squeeze. Last week saw the largest short liquidation volume in crypto since July 26, 2021, contributing to pushing BTC up 6%. ETH saw more substantial gains of 18%, driven by a heftier short squeeze. Throughout the last week, BNB has seen a more stable uptrend, possibly led by more BNB enthusiasm related to Binance's role in Musk's Twitter takeover.

Traders should prepare for volatility in the coming weeks, as the event calendar is crowded with potentially market-moving events. Wednesday's FOMC (see page 9) is this week's key event, but company earnings (MicroStrategy November 1, Coinbase November 3), economic data, and U.S. mid-terms may also lead markets to move.

Figure 3: Top 3 Market Cap, Last Week



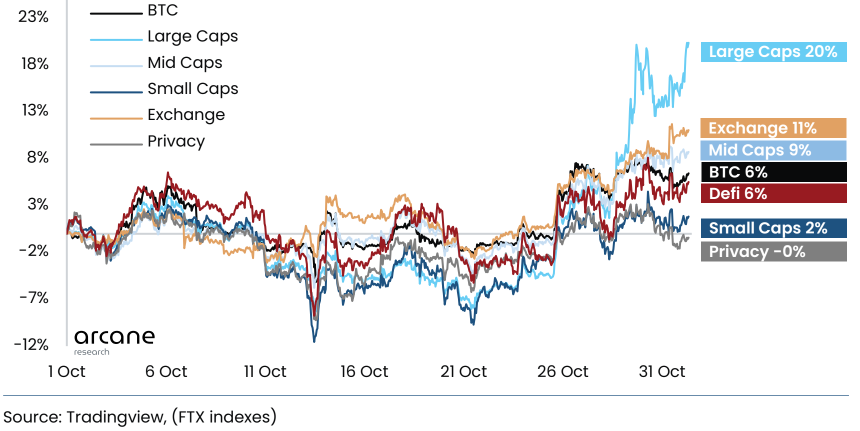
Source: Tradingview, (Coinbase, Binance U.S.)

Uptober after all
Surrealism has returned to crypto markets this week. While BTC and exchange tokens outperformed the rest of the market up until October 26, Elon Musk's Twitter takeover contributed to pushing the Large Caps Index to become the winner of October, seeing gains of 20% in the last month.

In sum, large caps have seen massive strength on the backdrop of a substantial short squeeze and narrative-related memecoin strength, a perfect storm. Dogecoin's 144% push in the last seven days is the key contributor to the large-cap strength. The Doge strength is caused by enthusiasm related to Musk's confirmed Twitter takeover, and the push had spill-over effects on SHIB driven by spread-related trading strategies. Additionally, ETH and BNB have a substantial weighting in the Large Caps Index.

Outside of Large Caps, most other indexes trade in a strongly correlated environment, with the Exchange Token Index, Mid Caps Index, BTC, and Defi Index seeing gains ranging from 11 to 6 percent. Small caps and privacy coins represent this month's poorest performers, with the Privacy Index pushing slightly in the red in October as the sole crypto index.

Figure 4: Monthly Performance of Market Cap Weighted Indexes



Source: Tradingview, (FTX indexes)

Headlines last week

Meta reports over $9 billion in losses for its metaverse division

Bitcoin miner Core Scientific down 75% after bankruptcy warning

Argo Blockchain shares fall 50% as Bitcoin miner faces negative cash flow

Google launches cloud node engine service for Ethereum

Revolut to add crypto payment feature starting next month

UK Lawmakers Vote to Recognize Crypto as Regulated Financial Instruments

Binance confirmed as investor in Twitter takeover

Calendar

Tuesday, November 1
- U.S. ISM Manufacturing PMI
- U.S. JOLTs Job Openings (Sep)
- MicroStrategy Q3 Earnings

Wednesday, November 2
- **FOMC (Est: 75bps)**
- Robinhood Q3 Earnings

Thursday, November 3
- BoE Interest Rate Decision (Est: 75bps)
- Coinbase Q3 Earnings
- Block Q3 Earnings
- PayPal Q3 Earnings

Friday, November 4
- U.S. Non-farm Payroll

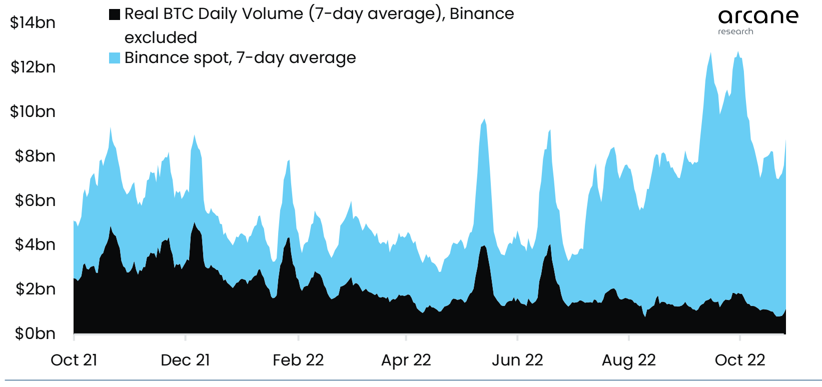
Tuesday, November 8
- U.S. Mid-terms

Spot Market

Short squeeze revitalizes the market
The seven-day average BTC spot volume is up 46% in the last seven days, as last week's strength and short squeeze reignited activity temporarily in the market. However, trading volumes have again softened in recent days as BTC has stabilized at $20,500.

We expect volumes to pick up again this week due to the hectic event calendar onwards. The FOMC press conference, in particular, is likely to contribute to maintaining vibrant activity in the market.

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

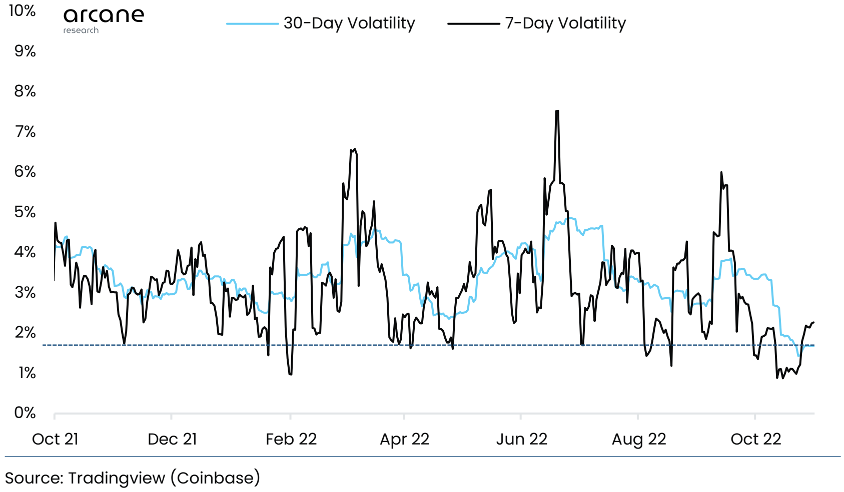


Source: Tradingview *Includes Bitwise 10 exchanges and FTX

2-year low daily volatility
Following the strong recovery last week, prices have again stabilized at $20,500, leading the 30-day volatility to stay low. The short squeeze failed to facilitate a substantial change in momentum, and the directionless state of BTC remains sticky.

BTC's 30-day volatility currently sits at 1.7%, still at 2-year low levels. The 7-day volatility has grown to 2.2%, which is still substantially lower than the yearly average 7-day volatility of 3.1% and the yearly median volatility of 3%. In sum, BTC's volatility stays in shallow terrain, despite last week's chaotic short squeeze.

Figure 6: BTC-USD Volatility



Source: Tradingview (Coinbase)

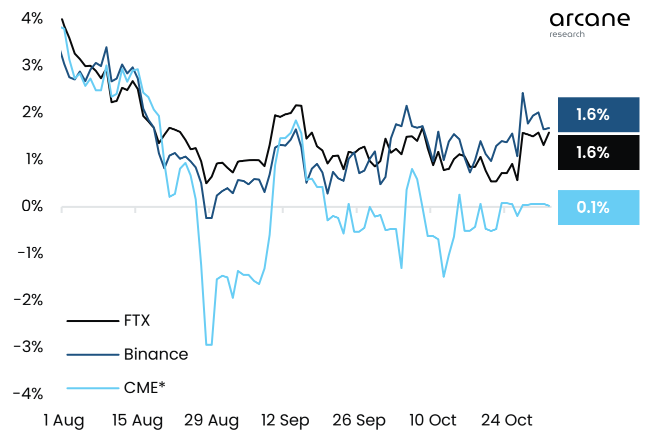
Fear and Greed

Now: 30 (Fear)
Last week: 20 (Extreme Fear)
Last month: 20 (Extreme Fear)

Derivatives

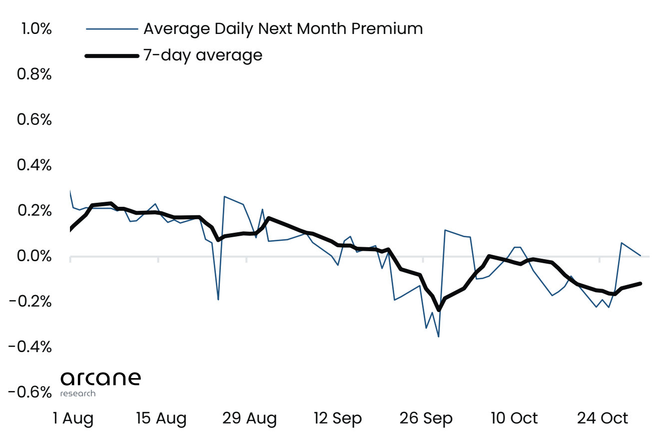
CME, Futures and ETFs

Figure 7: Bitcoin Futures Annualized Rolling 3-Month Basis



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

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



Source: Tradingview

Futures basis
Futures still trade in a very flat structure, with no material changes in the 3mth basis over the last few months.

The basis on Binance and FTX closely aligns, and both exchanges saw futures premiums pushing up during the short squeeze. Since, premiums have stabilized and futures trading activity remains idle.

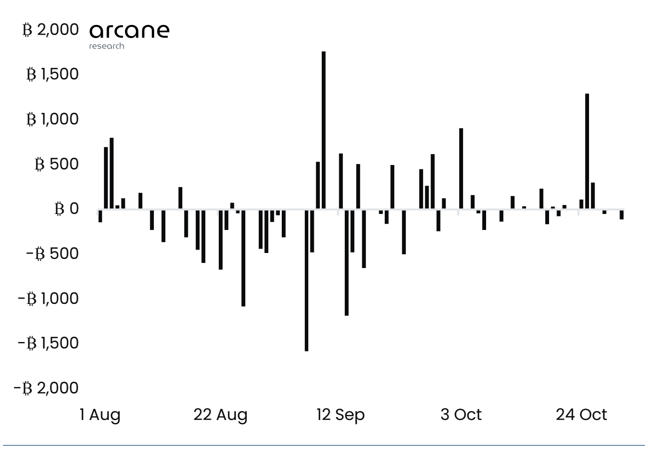
The CME futures basis has been flat over the last week, trading at an annualized premium of 0.1% to spot, signaling conservative positioning from institutional market participants.

A flattening futures curve
The idle state of CME futures is reflected in prolonged backwardation.

Institutional traders seem to maintain a cautious market view, as the next month's expiry tends to trade below the front-month contract.

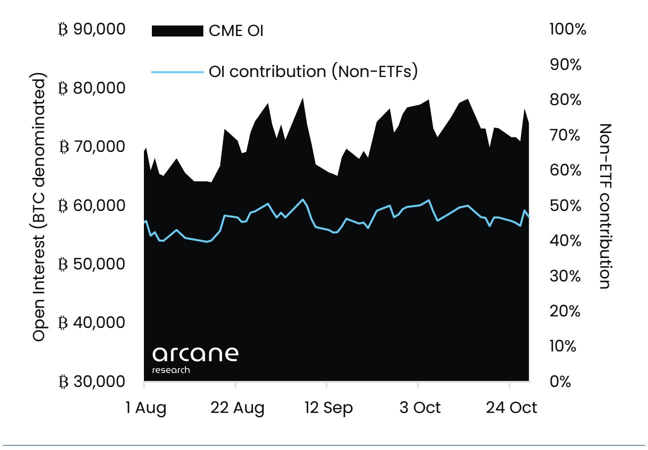
While the flat basis and prolonged tendency of CME futures to trail in backwardation suggest a negative sentiment among institutional traders, it contributes to leading long BTC ETFs to incur lower rolling costs, leading to lesser underperformance vs. the underlying.

Figure 9: ProShares: Net Flow – BTC Equivalent



Source: ProShares

Figure 10: CME BTC Futures: Open Interest



Source: Coinglass, ProShares, Valkyrie, VanEck

Strong daily net flows to ProShares on October 25
U.S. BTC ETF traders entered the market during the October 25 strength, leading to ProShares' fourth strongest net flow day since November 1, 2021. BITO (long ETF) saw its 5th largest daily net inflow since November 1, while BITI (short ETF) saw its 4th largest daily net outflow since launch.

As BTC again stabilized, flows stopped. We have seen no material flows since October 27, outside of minor inflows to short ETFs. This aligns with the stabilizing basis in CME's BTC futures.

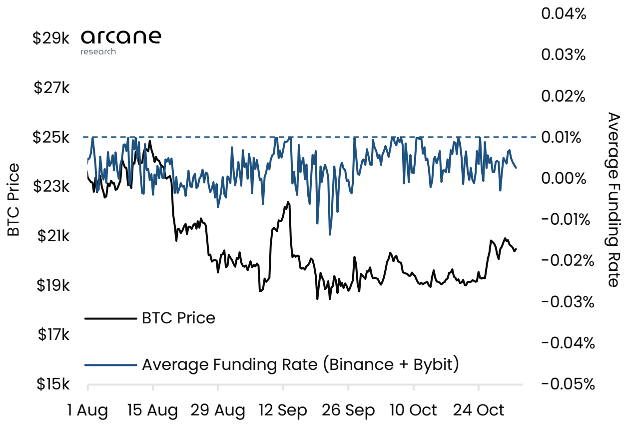
Institutional traders remain inactive
Active futures traders on CME remain inactive in the market, suggesting a conservative sentiment from institutional traders. CME's open interest has stabilized at 70,000 BTC, and recent strong inflows to ETFs continue to account for more than 50% of the open interest in CME's BTC futures.

This implies that CME traders are relatively inactive in the market, likely due to BTC still oscillating firmly within its prolonged trading range as a hectic news cycle approaches.

Derivatives

Perpetual Swaps and Options

Figure 11: Bitcoin Perpetuals: Funding Rates vs BTC Price



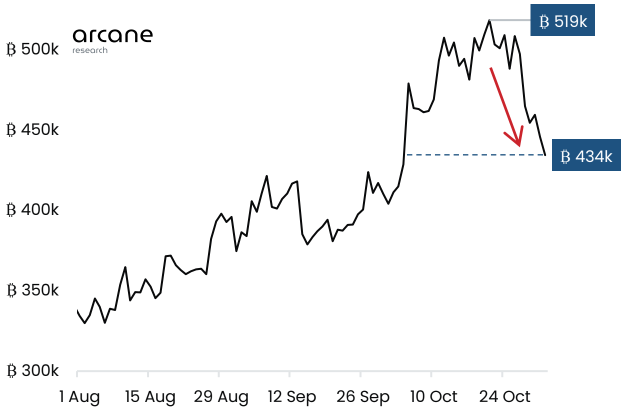
Source: Bybit, Binance, Tradingview (Coinbase)

Funding rates are still below neutral – A promising signal

While the crypto market saw strength last week, funding rates continue to trail in a below-neutral environment, differing from previous periods of strength in recent months. Both the early August rise towards $25k and the September 12th recovery saw funding rates resuming to neutral territory.

The below-neutral funding rates are a promising signal from the market as it suggests that perp traders are unconvinced by the recent move and that leverage is far from concentrated in leveraged long positions.

Figure 12: Bitcoin Perpetuals: Open Interest



Source: Laevitas

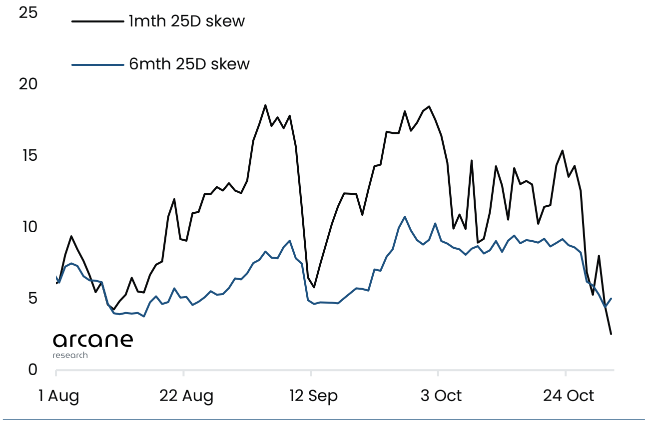
A short squeeze with a soft impact

The crypto market experienced a massive short squeeze last week. The BTC-denominated open interest in perps currently sits at 434k, down 24% from the intraday peak of 539k BTC on October 13.

Overall, the decline in leverage in the market is a welcoming development. It seems to be related to last week's short squeeze (page 10) and long positions being closed, leading funding rates to stay below neutral.

While the deleveraging is a positive signal, open interest still remains elevated, at nearly 2x the highs of 2021.

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



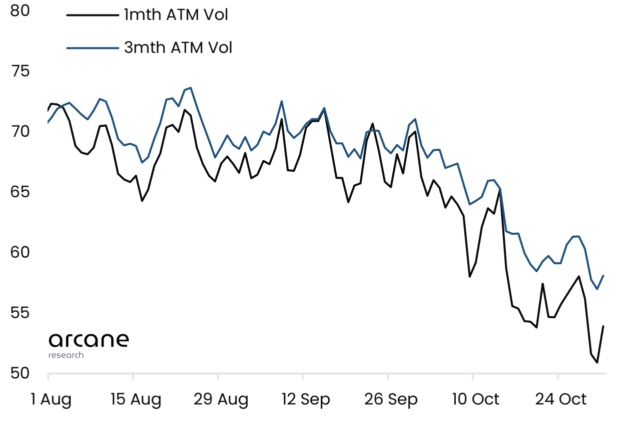
Source: Laevitas

Firming skews

Options traders are showing early signs of optimism as skews are firming. Throughout the year, out-of-the-money puts have tended to trade at a substantial premium to out-of-the-money calls. However, after the October 25 short squeeze, the 25D skew has trailed lower, reaching its lowest levels since March.

Overall, options traders still predominantly position towards more downside protection, but the normalizing skew indicates some positive tendencies in the market.

Figure 14: BTC Options – Implied Volatility



Source: Laevitas

Implied Volatility: Straddles are cheap

It's currently cheap to make a contrarian volatility bet. Alongside the muted volatility in BTC spot markets, options IVs have seen a strong downward trend throughout October. On Sunday, the 3mth IV reached lows that's only been visited five times since April 2020.

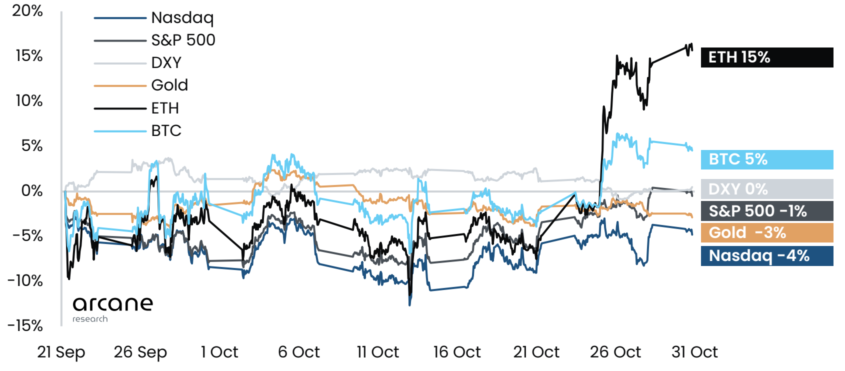
The low IVs are a suitable environment for contrarian bets on re-appearing BTC volatility. The timing could be great for straddle strategies purchasing far-dated expiring puts and calls.

A deeper dive
FOMC

Relative crypto strength since FOMC meeting
Wednesday's FOMC press conference will likely lead to volatility in a highly correlated environment between crypto and U.S. equities. Currently, the market is pricing in an 86% probability of a 75bps hike versus an 14% probability of a 50bps hike. The odds for a 50bps hike have increased materially in the last week as chatter about a FED pivot has strengthened. A 75bps hike is still the most likely outcome, but due to rising expectations of a 50bps hike, a 75bps hike is poised to reflect negatively on the market.

Since the last FOMC meeting, crypto has outperformed broad financial markets. ETH and BTC saw massive short-lived selling pressure immediately after the FOMC but recovered comfortably, trading in the green since the last FOMC. Gold and equity indexes, on the other hand, are in the red. This is a positive sign of relative strength from crypto, and we note slight signs of declining correlations (figure 19, page 12). FOMCs tend to lead to elevated correlations across asset classes, which will likely repeat this Wednesday.

Figure 15: Asset Performance since September 21 FOMC

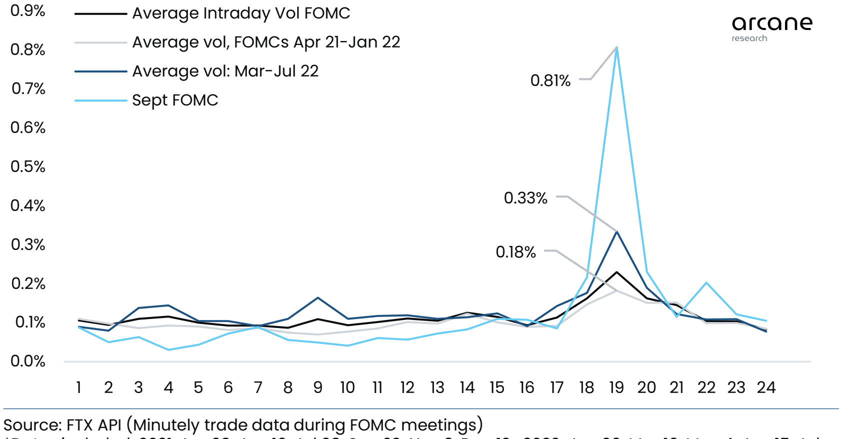


Source: Tradingview (Hourly returns from Sep 21, 18:00 CET)

Expect volatility
During FOMC meetings, volatility tends to surge. The September 21 FOMC was the most volatile FOMC to date, as BTC saw average minutely price fluctuations of 0.81% during the press conference. FOMC days have tended to become more volatile recently. From April 2021 to January 2022, before FED's hiking cycle, FOMC volatility was softer, reaching 0.18% during the press conference. The FOMC meetings from March to July saw higher volatility, reaching 0.33% on average per minute. The September FOMC was uniquely volatile, caused by the massively negative initial response followed by a strong recovery.

While FOMCs are notoriously volatile, they are also notoriously difficult to trade. Intraday volatility is a characteristic feature, but even the September 21 reaction retraced, and BTC experienced daily losses of -3%, but intraday high-low swings of 9%.

Figure 16: Bitcoin: 60 min rolling volatility on FOMC day* (Time zone: CET)



Source: FTX API (Minutely trade data during FOMC meetings)
*Dates included: 2021: Apr 28, Jun 16, Jul 28, Sep 22, Nov 3, Dec 12. 2022: Jan 26, Mar 16, May 4, Jun 15, Jul 27, Sep 21.

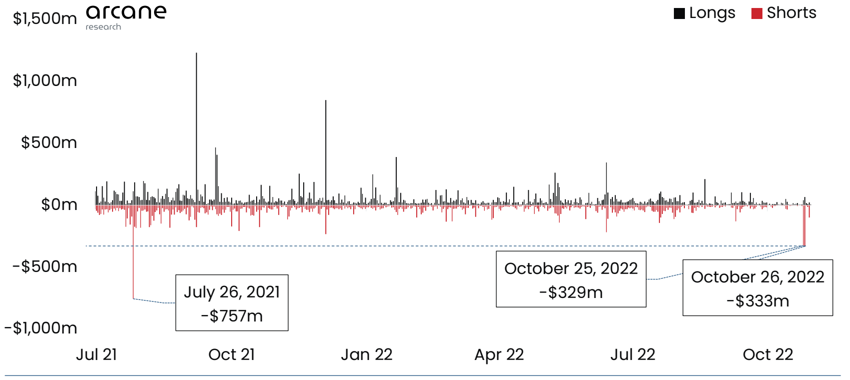
A deeper dive
The short squeeze

Massive short squeeze, muted market impact
Last week, crypto derivatives recorded the largest short squeeze since July 26, 2021. In BTC derivatives alone, $330m worth of shorts were liquidated on both October 25 and October 26. The crypto market as a whole experienced $704m and $618m worth of liquidations these days, with ETH perps seeing exceptionally high liquidation volumes on FTX.

We've long focused on the risks of squeezes. However, this squeeze has had a minimal impact on the BTC price. The July 26 squeeze saw a daily high-low variation of 15% as markets hastily moved up, whereas the October 25 and October 26 moves saw daily high-low variations of 5% and 6%, respectively. Further, momentum has stopped, indicating that traders should brace for longer consolidation if the FOMC does not provide an unlikely surprise pivot.

This could indicate a) an influx of sellers as BTC trades above 20k and/or b) FTX's liquidation engine impact. FTX's handling of liquidations may have a softer impact on the market than other offshore venues due to partial liquidations.

Figure 17: Bitcoin liquidation volume – Offshore perps and futures

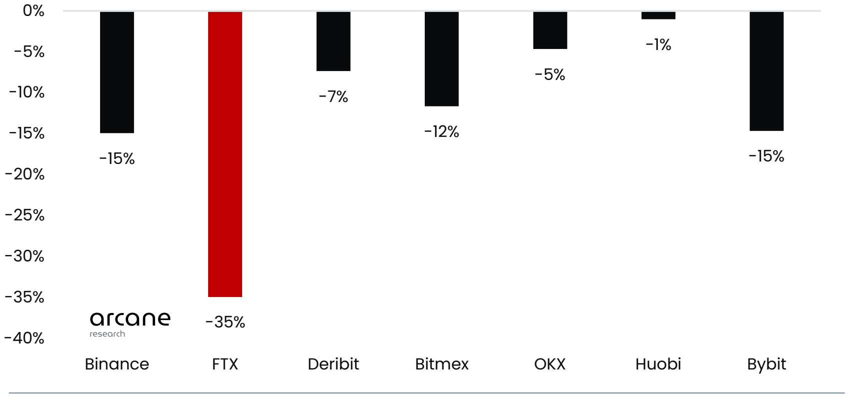


Source: Coinglass, Laevitas

Liquidation volumes are higher than reported
The liquidation volume is underestimated. Last year, both Binance and Bybit changed their APIs, restricting liquidation API calls to one push per second, citing that changes were made to create a "fair trading environment". This has had direct implications on the aggregated liquidation data. We aim to highlight these API restrictions following CZ's tweet, using the restricted liquidation data and comparing it to more transparent competitors.

There are no direct ways to estimate the liquidation volume on Binance or Bybit. However, one may use a back-of-the-envelope approach, looking at how open interest changed over the day. On Binance, ETH OI peaked at 1.87m ETH and declined to 1.5m, down 24%. BTC OI fell from a 205k peak to 180k, down 14%. This is slim compared to FTX's OI plunge of 34% but still suggests that Binance's liquidation volume was far higher than the reported 5% of global liquidation volume.

Figure 18: Open Interest BTC perps, percentage change from Oct 25, 16:30 CET

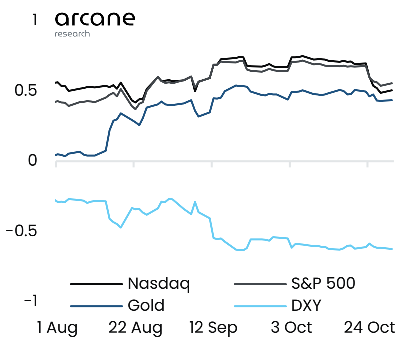


Source: Laevitas

Market Related Charts

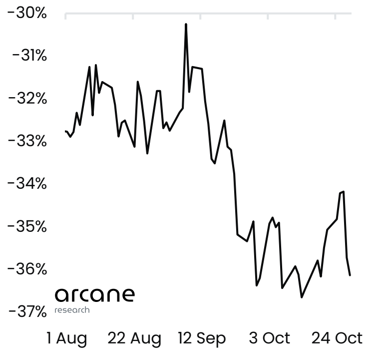
Data updated Monday Oct 31, 2022

Figure 19: BTC 30-d correlations*



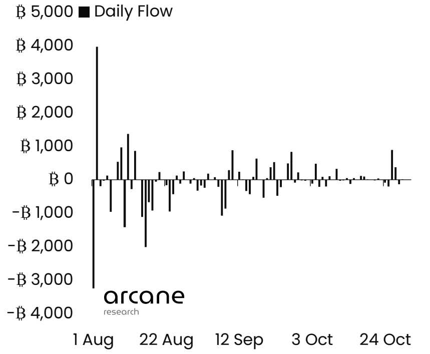
Source: Tradingview *Pearson

Figure 20: Grayscale Premium/Discount



Source: Ycharts

Figure 21: Daily Flows (BTC ETFs)



Source: Bytetree

Figure 22: BTC Dominance

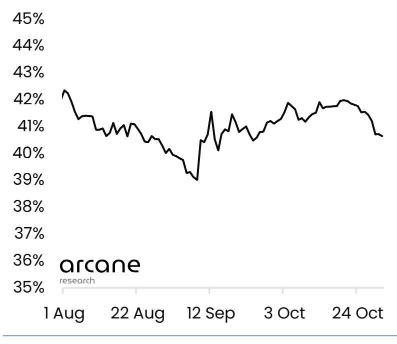


Figure 23: BTC + Stables Dominance

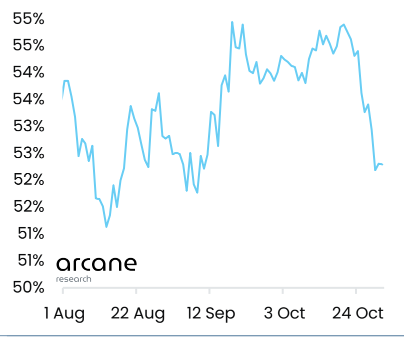
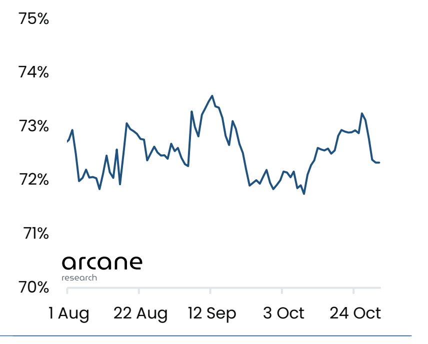
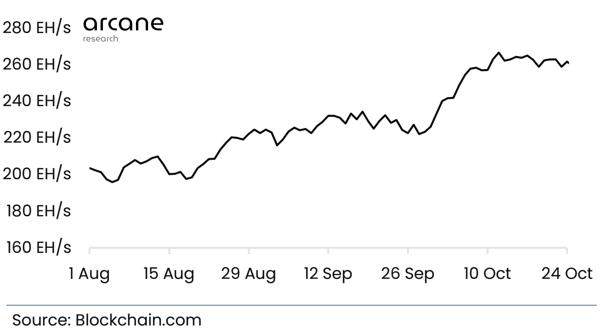


Figure 24: BTC + Stables + ETH Dominance



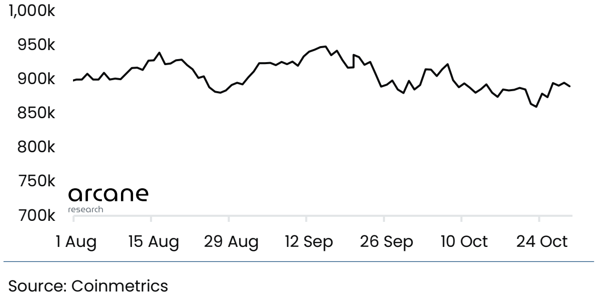
Source: Tradingview

Figure 25: Bitcoin Hashrate (7-day average)



Source: Blockchain.com

Figure 26: Active Addresses (7-day average)



Source: Coinmetrics

Figure 27: On-chain statistics

Powered by BYTETREE	30/10/2022	7d Change
Daily Miner Revenues	$18,243,504	0.93%
Fees per day	$337,485	39.08%
Fees % Revenues	1.85%	0.51%
Daily TX Volume ($M)	$3,455	27.23%
Transactions per day	263,414	4.33%
Avg TX value $	$13,114.56	21.95%
# Blocks per hour	5.86	-4.93%
Avg. # TX per block	1874	4.33%

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 FTX's sector indexes to highlight important trends within various crypto categories. These indexes are an efficient tool to assess transitional narrative changes. At a glance, these indexes are efficient in assessing the market, and they are tradeable – so you may act on the information swiftly. However, they have certain issues related to index weighting. Certain old coins may contribute to suppressing or distorting strength, and there are also particular examples of coins being included in indexes where they should not be included. We'll write a more detailed critique of these indexes in the future – and will make sure to keep you notified when it's available.

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. Since new exchanges have emerged, we have thus FTX. 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 and FTX basis to compare offshore and CME premiums to highlight different sentiments between institutional traders and retail. While FTX and 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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