

# Ahead of the curve Market Update

#### Holiday season - Also in the markets

The crypto market has stagnated over the last two weeks during the Christmas holidays. BTC and ETH have experienced slight declines in the previous seven days but trade in a very stable price range. The current stale price action is reflected in BTC's volatility, which has slumbered toward rare lows, evident by the 7-day volatility in BTC, reaching lows not seen since July 2020. The dwindling volatility is accompanied by spot volumes drying up and the futures market reigning in a flat regime.

The entire market is generally stabilizing, accompanied by apathetic market participation. Closed U.S. markets are likely the core reason behind the dull price action of late, but it's also been exaggerated by a general exodus of active retail participation and few important news catalysts. As we enter the year, potential catalysts are approaching, with the most notable crypto-specific market-moving event being related to the current DCG situation, which could materialize into an involuntary Chapter 11 petition.

Amidst the quiet markets, <u>we published our 2022 year in review report</u>, featuring 2023 outlooks where we made a case for low volatility and stagnant markets to be a key trend throughout the year.

### Winklevii's pressuring DCG

Investors should pay attention to the ongoing financial distress related to Digital Currency Group as the outcome could severely impact crypto markets. In short, if DCG enters bankruptcy, the company could be forced to liquidate its assets. This could force DCG into selling its sizable positions in GBTC and unknown positions in ETHE and other Grayscale trusts. One natural, less liquidity-constrained route to this sale could be to initiate a Reg M, allowing traders to redeem shares at NAV, which would narrow the discounts – this is where the impact will be felt in crypto markets.

Currently, GBTC trade at a 45% discount to its NAV, while ETHE trades at a 59% discount to its NAV. GBTC holds 3.3% of the circulating BTC supply and 2.5% of the ETH supply. A Reg M would cause a massive arbitrage strategy of selling crypto spot versus buying Grayscale Trust shares. If this scenario plays out, crypto markets could face further downside. Over a longer time horizon, the market would finally get rid of the major burden that the Grayscale widow maker trade has generated, so it is shaping up to become a potential market bottom event.

Since we last covered the DCG situation, more pressure has emerged. Most recently as Cameron Winklevoss published <u>an open letter</u> to DCG's CEO Barry Silbert alleging that Barry has acted in bad faith stall tactics, with Genesis owing Gemini Earn users \$900m. The open letter concluded with Cameron seeking from Barry to publicly commit to cooperating and solving the problem by January 8. Meanwhile, the letter did not disclose Gemini's intended path if Barry does not respond, but the situation could develop into a coordination of an Involuntary petition for a DCG Chapter 11.

Today is Bitcoin's 14th birthday. Thank you, Satoshi Nakamoto!

### **Digital Assets**

### Signals from the market

#### Bendik Schei

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

#### Vetle Lunde

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

### By the numbers

BTCUSD \$16,720	ETHUSD \$1,216
7d: <b>-1%</b>	7d: -1%
30d: -2%	30d: -5%

#### **Open Interest (BTC futures and perps)** \$8.2bn

487,000 BTC (**0.1%** last seven days)

# Average daily BTC spot volume \$4.4bn (-3% last seven days)

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

ETH	Gold	S&P 500	DXY
0.89 (-0.01)	0.32 (0.00)	0.56 (0.00)	-0.47 ( <del>-0.01</del> )

### Percentage of Total Market Capitalization

eekly change in percentage points

BTC	ETH	Stablecoins	Rest
39.9% (0%)	18.4% (0.1%)	15.8% (-0.1%)	25.9% (0%)

### Last week of top 50 by market cap

	ricker	/a	YID
Gainers			
1	OKB	30%	10%
2	LDO	20%	15%
3	APE	11%	3%
Losers			
1	HBAR	-11%	2%
2	TON	-7%	-7%
3	LINK	-6%	1%

Figure 1: Cumulative returns ETH vs ETHE (June 1, 20 - Dec 30, 22)

1900%	orcane				
1700%			Λı		
1500%	—— ETHE	1 .	ĮΨ		
1300%	—— ETH	A	/ 1	4	
1100%			1 1A	/\	
900%			, AM	'\	
700%		./' W		h h	
500%	ſ	Įγ		7 196	W
300%	M			W	ETH 379%
100%	A presented on	سريهمريه	wand	^	
-100%				-	ETHE -69%
Ju	n 20 Dec 20	Jun 21	Dec 21	Jun 22	Dec 22

Source: Tradingview

Figure 2: Binance dominance in crypto spot and derivatives

Binance Dominance	Jan 1, 2022	Dec 28, 2022	Change*
BTC Spot volume dominance (Bitwise Real Volume)	45%	92%	+47%
BTC Futures/Perps Open Interest Dominance	29%	30%	+1%
BTC Futures/Perps volume dominance	47%	61%	+14%
Crypto Perps OI dominance	39%	49%	+10%
Crypto Perps volume dominance	56%	66%	+10%
BUSD stablecoin dominance (USDT+USDC+BUSD)	11%	14%	+3%

Source: Tradingview, Laevitas, CME Group \*In Percentage Points



# 2022 in review A year of expensive lessons

Excerpt from our year in review report. Full report can be accessed here.

2022 has been a yearlong hangover. 2020–2021 was a zero-interest rate policy party, rewarding the most suave party attendants for extreme risk-taking. Combine easy money, extreme returns, and nascent explorative visionary tech with intricacies understood by few, and you have a proper breeding ground for charlatans and fraudsters. During the two-year-long extravaganza of 2020 and 2021, many were enchanted by the suave. This caused an unsustainable build-up of credit towards the "bravest" risk-takers.

Consistent interest rate hikes and quantitative tightening in 2022 granted us a devastating hangover. Fortune did not favor the brave, and we entered a consistent doom cycle of default, fraud, and contagion. A financial crisis with seemingly no end that still ravages our industry. In 2022, the naked swimmers were exposed and bad apples got eliminated. This is promising through long-term lenses, while ever so painful in the short term.

While other crypto analysts point towards the chaotic year of 2022 being caused by financial markets and not crypto tech, arguing that BTC and other chains still produce blocks, we would like to backtrack on this slightly.

Yes, the blockchains work as intended – and it is fantastic! BUT, crypto is pure open finance. A borderless battleground for testing in production. Fast and slick intermediary-free transactions toppled with a prolonged buoyancy trend. This is a breeding ground for risk-taking.

While the blockchain is transparent, a lot of the most influential activity originates off-chain, through backdoor agreements, on exchanges, and in the largely unregulated global markets. This is primarily possible due to crypto being purely borderless and will likely cause headaches and hangovers also in the future. This is the first financial crisis in crypto, not the last, and new hard-earned lessons will be learned in the distant future.

We are not seeking to sugarcoat the current state of crypto but want to balance what's overwhelmingly been a negative year for the industry by focusing on various positive tendencies. In 2022, BTC censored no one and represented an alternative for sanctioned individuals, while censorship-resistant attributes of bitcoin and crypto regained relevancy following the tragic war in Ukraine. Ethereum finally transitioned from Proof of Work to Proof of Stake, and the industry got rid of ill-intentioned charlatans.

Over the last year, we have relearned an old bitcoin slogan - trust no one.

Intermediaries, in general, and lenders and exchanges, in particular, represent risks through venues of trust. This year's key lesson from active market participants should be the following: your funds in someone else's custody is someone else's liability, and their intentions could be harmful. While there are good arguments for storing funds at exchanges, traders should strive to avoid concentrating risks on one venue.

### Our 2023 outlook, condensed

We expect the market to calm down in 2023, with declining volumes and falling volatility. Overall, we expect interest and headlines related to crypto to be fewer and the market to be less hectic in general. This will be a year to accumulate and build exposure. It will be a year for the patient, and we do not anticipate prices nearing former all-time highs in 2023. We believe BTC and ETH will increase their relative strength in the market and that altcoin returns will be subdued for most of the year.

To condense our market view into a stupid analogy (where clothes=crypto): In 2022, we pushed our clothes into the washing machine on a 3-hour program. Twenty minutes remain of this washing process, and then the clothes will have to be placed in the tumble dryer so we eventually can return to the streets and flaneur in style.

### **Digital Assets**

**December Market Opinion** 

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





# Spot Market

### Holiday season - Also in the markets

The crypto market has stagnated over the last two weeks during the Christmas holidays. BTC and ETH have experienced slight declines in the previous seven days but trade in a very stable price range. The current stale price action is reflected in BTC's volatility, which has slumbered toward rare lows, evident by the 7-day volatility in BTC, reaching lows not seen since July 2020. The dwindling volatility is accompanied by spot volumes drying up and the futures market reigning in a flat regime.

The entire market is generally stabilizing, accompanied by apathetic market participation. Closed U.S. markets are likely the core reason behind the dull price action of late, but it's also been exaggerated by a general exodus of active retail participation and few important news catalysts. As we enter the year, potential catalysts are approaching, with the most notable crypto-specific market-moving event being related to the current DCG situation, which could materialize into an involuntary Chapter 11 petition.

Amidst the quiet markets, we published our 2022 year in review report, featuring 2023 outlooks where we made a case for low volatility and stagnant markets to be a key trend throughout the year.

Figure 3: Top 3 Market Cap, Last Week

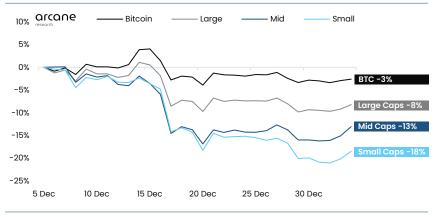


Source: Tradingview, (Coinbase, Binance U.S.)

### A Liquid Staking Derivative narrative has emerged

Crypto markets at large remained stagnant during our two-week Ahead of the Curve hiatus, and volatility remains shallow across the board. Meanwhile, we note that liquid staking ETH derivatives have gained momentum as the market braces for Ethereum's Shanghai upgrade, which will enable staking withdrawals. This has caused strength in LDO and RPL, among others.

Figure 4: 30d Performance of Market Cap Weighted Indexes



Source: Bletchley Indexes, Tradingview (Coinbase)

#### Headlines last week

Genesis-DCG Loan Leads to Class Action <u>Arbitration Case From Gemini Clients</u>

Gemini Takes Spat With DCG Public in Open Letter

Mango Markets Attacker Avraham Eisenberg Arrested, Charged With 'Market-Manipulation Offenses'

Valkyrie wants to 'manage and sponsor' Grayscale's GBTC

MicroStrategy Added 2,500 Bitcoins for \$45M in

MicroStrategy sold bitcoin worth \$11.8 million for tax benefits

### Calendar

Wednesday, January 4
• FOMC Meeting Minutes

SBF expected to Enter Plea

Friday, January 5

US Non-farm Payrolls

Monday, January 8

Gemini deadline to DCG



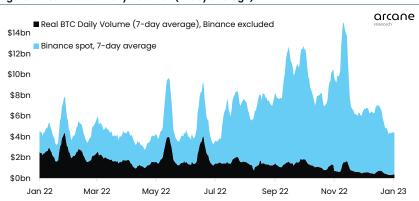
# **Spot Market**

#### Lowest volumes since Binance removed fees

The market activity is falling further. Volumes are at lows not seen since before Binance introduced zero trading fees on its BTC pairs last summer, and volumes outside of Binance are shallow. In addition to declining trading volumes in the spot market, we note a similar fall in trading volumes in perps in our year-in-review report.

All in all, this reduction in trading volume suggests a considerable slump in market participation, which in part could be caused by the Holiday season.

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



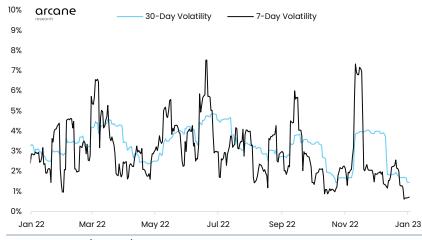
Source: Tradingview \*Includes Bitwise 10 exchanges

### Volatility at 2.5-year low

Alongside diminishing trading volumes, we note a sharp decline in BTC's volatility. Bitcoin's seven-day volatility has declined to 0.7% and sitting at lows only visited once since February 2019 – during the stagnant markets of July 2020.

The 30-day volatility follows suit, currently sitting at 1.4%, coinciding with levels that were briefly touched before the FTX collapse in early November. In fact, the 30-day volatility has only been lower on seven occasions since February 2019, i.e., 0.5% of days since February 2019. These low volatility periods rarely last for long, and volatility compression periods have previously tended to be followed by sharp moves, even in stagnant markets.

### Figure 6: BTC-USD Volatility



Source: Tradingview (Coinbase)

#### Fear and Greed

Now: 26 (Fear) Last week: 27 (Fear) Last month: 27 (Fear)

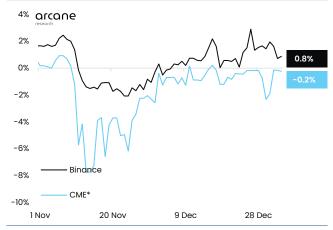




### **Derivatives**

### CME, Futures and ETFs

Figure 7: Bitcoin Futures Annualized Rolling 3-Month Basis

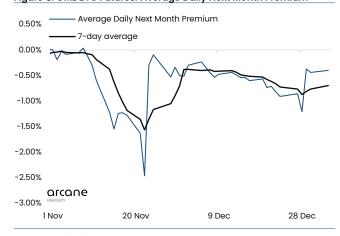


Source: Skew, Laevitas, Tradingview, CME \*Closed Saturday - Sunday

### Basis enters the year flat

Futures premiums remain in the same range as noted in our previous report, as activity in derivatives closely mirrors that of the spot market with sharply declining trading volumes.

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

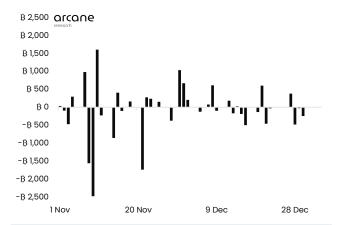


Source: Tradingview

#### **Backwardation still**

The futures term structure stays in backwardation, with no material changes over the last two weeks.

Figure 9: ProShares: Net Flow - BTC Equivalent

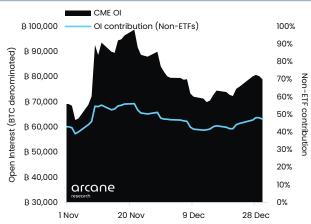


Source: ProShares

### ETFs in Holiday mode

BTC ETFs have also experienced stagnant flows in the last two weeks, with no major inflows nor outflows since the Holiday season started, suggesting that also ETF traders have been idle amidst the dwindling volatility in BTC.

Figure 10: CME BTC Futures: Open Interest



Source: Coinglass, ProShares, Valkyrie, VanEck

### Open interest climbed again towards year-end

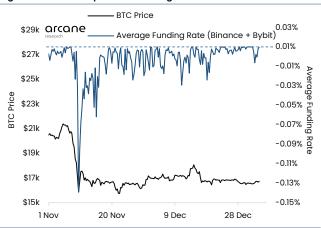
CME's open interest climbed above 80,000 BTC toward the year-end. The growth was caused by active market participants, as the non-ETF contribution to OI grew from 42% on December 20 to 47% on December 30. Anyhow, the growth has been accompanied by a flat futures basis. Thus, it is challenging to infer any directional information related to the recent increase in active institutional participation.



### **Derivatives**

# Perpetual Swaps and Options

Figure 11: Bitcoin Perpetuals: Funding Rates vs BTC Price



Source: Bybit, Binance, Tradingview (Coinbase)

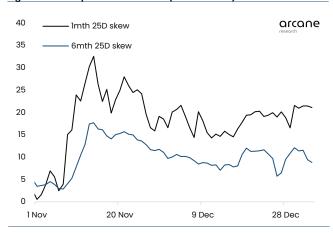
#### Low activity ensues in perps

Perps have also been quiet over the Holiday season. Funding rates have once again approached neutral territory, but trading activity is low, as we have already observed elsewhere in the market.

We take the opportunity to summarize key insights from our year in review report. Perps currently see trading volumes 70% lower than we saw during the H1 2022 lows. Meanwhile, we note that Binance dominates the perp market, representing 61% of BTC derivatives volume, as illustrated on page 8.

Funding rates have now reigned in a neutral-to-below-neutral terrain for 13 consecutive months.

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

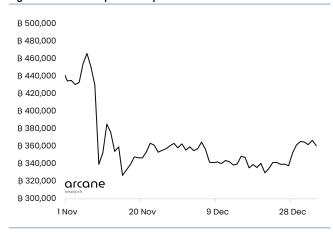


Source: Laevitas

### Options traders still seek protection

Skews still indicate that options traders seek downside protection and have stabilized since Mid-December, with no material changes compared to our last report.

Figure 12: Bitcoin Perpetuals: Open Interest

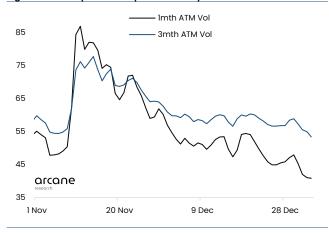


Source: Laevitas

#### Open interest also stable

To conclude the slow state of markets of late, we note that the open interest in BTC perps has also flatlined, sitting at 360,000 BTC.

Figure 14: BTC Options - Implied Volatility



Source: Laevitas

### 1mth IV reaches all-time low

Options IVs reflect the current low volatility regime in the market, as IVs have fallen further, with the 1-month IV reaching an all-time low of 40 on Monday.

The 3-month IV has also declined towards all-time lows, currently sitting at 53. Options are becoming attractively priced for potential straddles as the next three months are filled with potential catalysts related to macro (FOMC), the evolving DCG situation, and the EU MiCA vote in February.



research

# A deeper dive

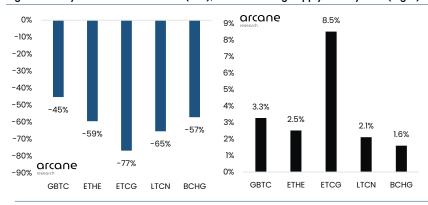
## Gemini putting further pressure on DCG

Investors should pay attention to the ongoing financial distress related to Digital Currency Group (DCG) as the outcome could severely impact crypto markets. In short, if DCG enters bankruptcy, the company could be forced to liquidate its assets. This could force DCG into selling its sizable positions in GBTC and unknown positions in ETHE and other Grayscale trusts. One natural, less liquidity-constrained route to this sale could be to initiate a Reg M, allowing traders to redeem shares at NAV, which would narrow the discounts – this is where the impact will be felt in crypto markets.

Currently, GBTC trade at a 45% discount to its NAV, while ETHE trades at a 59% discount to its NAV. GBTC holds 3.3% of the circulating BTC supply and 2.5% of the ETH supply. A Reg M would cause a massive arbitrage strategy of selling crypto spot versus buying Grayscale Trust shares. If this scenario plays out, crypto markets could face further downside. Over a longer time horizon, the market would finally get rid of the major burden that the Grayscale widow maker trade has generated, so it is shaping up to become a potential market bottom event.

Since we last covered the DCG situation, more pressure has emerged. Most recently as Cameron Winklevoss published <u>an open letter</u> to DCG's CEO Barry Silbert alleging that Barry has acted in bad faith stall tactics, with Genesis owing Gemini Earn users \$900m. The open letter concluded with Cameron seeking from Barry to publicly commit to cooperating and solving the problem by January 8. Meanwhile, the letter did not disclose Gemini's intended path if Barry does not respond, but the situation could develop into a coordination of an Involuntary petition for a DCG Chapter II. Additionally, <u>on December 28</u>, investment advisor Valkyrie delivered a proposal to become the new sponsor and manager of GBTC while also announcing the launch of an opportunistic fund seeking to take advantage of the GBTC discounts.

Figure 15: Grayscale Trusts Discounts (Left), % of circulating supply held by trust (Right)

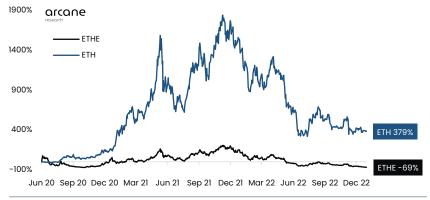


Source: Grayscale, Coinglass and Tradingview

### Grayscale's Hotel California has also been a widow maker trade with ETH

GBTC has gained most of the attention recently, which is natural for several reasons. Firstly, in light of Grayscale's ongoing lawsuit with the SEC related to ETFs with the Final Brief deadline of February 3, before a ruling will occur. Second, due to the publicly known sizable hole left by the 3AC liquidation this summer. Third, due to the vast size of GBTC's AUM (in USD) compared to the other trusts. Still, other trusts, such as ETHE, experienced similar inflow dynamics to GBTC in 2020–2021, likely also exaggerated by leverage. Since June 1, 2020, Grayscale's Ethereum Trusts' cumulative returns sits at -69% versus ETH's 379%.

Figure 16: Cumulative returns ETH vs ETHE - June 1, 2020 - December 30, 2022



Source: Tradingview



# A deeper dive

# Binance's year - 2022

### Binance: The winner of the year

Excerpt from our 2022 year in review. Full report available here.

There are no other evident "winners" of 2022 other than Binance when it comes to the crypto market structure and market dominance. No matter how you look at it in terms of trading activity, Binance is the crypto market. After lifting trading fees for its BTC spot pairs this summer, Binance completely overtook all market share in the spot market. While the organic nature of some of this volume may be negotiable, it's non-negotiable that this has consolidated Binance's dominance over BTC spot markets.

Derivatives have not benefitted from a similar fee removal, but still, the trend is clear. Binance is home to a vast majority of the trading volume in crypto derivatives, representing more than 60% of the BTC derivative volume and crypto perp volume.

### Additionally, in 2022 Binance has:

- 1. Taken market share in the stablecoin market
- 2. Seen its token vastly outperforming BTC and ETH
- Been a clear outlier in terms of employment, doubling its employee stack in a year when several competitors have laid off half its workforce or gone bankrupt.

Figure 17: Binance dominance in crypto spot and derivatives

gare za.ree aera.ree e., pre eper arra aera.ree			
Binance Dominance	Jan 1, 2022	Dec 28, 2022	Change*
BTC Spot volume dominance (Bitwise Real Volume)	45%	92%	+47%
BTC Futures/Perps Open Interest Dominance	29%	30%	+1%
BTC Futures/Perps volume dominance	47%	61%	+14%
Crypto Perps OI dominance	39%	49%	+10%
Crypto Perps volume dominance	56%	66%	+10%
BUSD stablecoin dominance (USDT+USDC+BUSD)	11%	14%	+3%

Source: Tradingview, Laevitas, CME Group

### OKX's remarkable recovery

Since January 2020, OKX has seen its market dominance fall from 30% to 8% and recover to 25% in a truly remarkable recovery. OKX's recovery is the most overlooked and remarkable structural change in BTC derivatives in 2022.

While 2021 was a devastating year for OKX due to Chinese crypto bans, leading the exchange's market dominance to plunge from 30% to 8%. 2022 has mostly been an upwards journey for OKX. Open interest has slowly and gradually grown, and OKX has reappeared as one of the most relevant crypto derivatives markets.

While OKX's growing market share of BTC's open interest is highly impressive, we note an odd observation from the previous slide that OKX's market share in terms of volumes has declined from 20% starting the year to 11% today.

Figure 18: BTC Futures and Perps: OKX Market Dominance



Source: Skew, Laevitas, CME Group

<sup>\*</sup>In Percentage Points

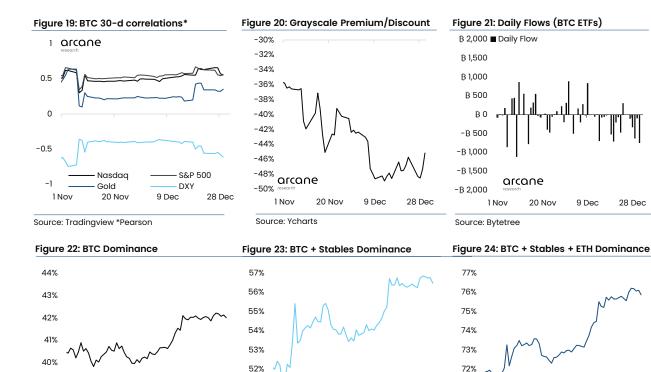
28 Dec

28 Dec



### **Market Related Charts**

Data updated Monday Jan 2, 2023



51%

50%

1 Nov

28 Dec

arcane

20 Nov

9 Dec

Source: Tradingview

1 Nov

arcane

39%

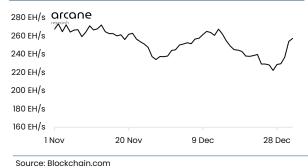
38%

Figure 25: Bitcoin Hashrate (7-day average)

Figure 26: Active Addresses (7-day average)

9 Dec

20 Nov



1.050k 1,000k 950k 900k 850k arcane 800k 1 Nov 20 Nov 9 Dec 28 Dec

Source: Coinmetrics

Figure 27: On-chain statistics

28 Dec

71%

70%

1 Nov

arcane

20 Nov

9 Dec

Powered by <i>퇴</i> BYTETREE	01/01/2023	7d Change
Daily Miner Revenues	\$15,489,228	10.59%
Fees per day	\$294,647	3.74%
Fees % Revenues	1.90%	-0.13%
Daily TX Volume (\$M)	\$2,557	-4.00%
Transactions per day	246,089	-2.36%
Avg TX value \$	\$10,390.59	-1.69%
# Blocks per hour	6.08	11.57%
Avg. # TX per block	1686	-2.36%

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 "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 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.



### Disclaimer

- Ahead of the curve (the "Report") by Arcane 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 Arcane Research nor Arcane Crypto 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 Arcane Research nor Arcane Crypto 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) Arcane Research and Arcane Crypto 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 Arcane Research or Arcane Crypto.
- By accessing this Report you confirm you understand and are bound by the terms above.
- 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.