

The Weekly Update

Week 38, 2022



Provided by **arcane**
research

1

Market Update

- After an uplifting Tuesday morning, BTC sees a positive seven day-return of 3% in what's been a volatile week in global financial markets.
- After Tuesday's morning relief in crypto, BTC is in the green in September, outperforming equity indexes and gold.
- ProShares' short BTC ETF's AUM has climbed towards new highs as more traders seek to speculate on downside in BTC, with BTC trailing near range lows.
- The financial statements of public bitcoin mining companies look grim, revealing that most of them have lost money in their lifetimes.

2

Valuation

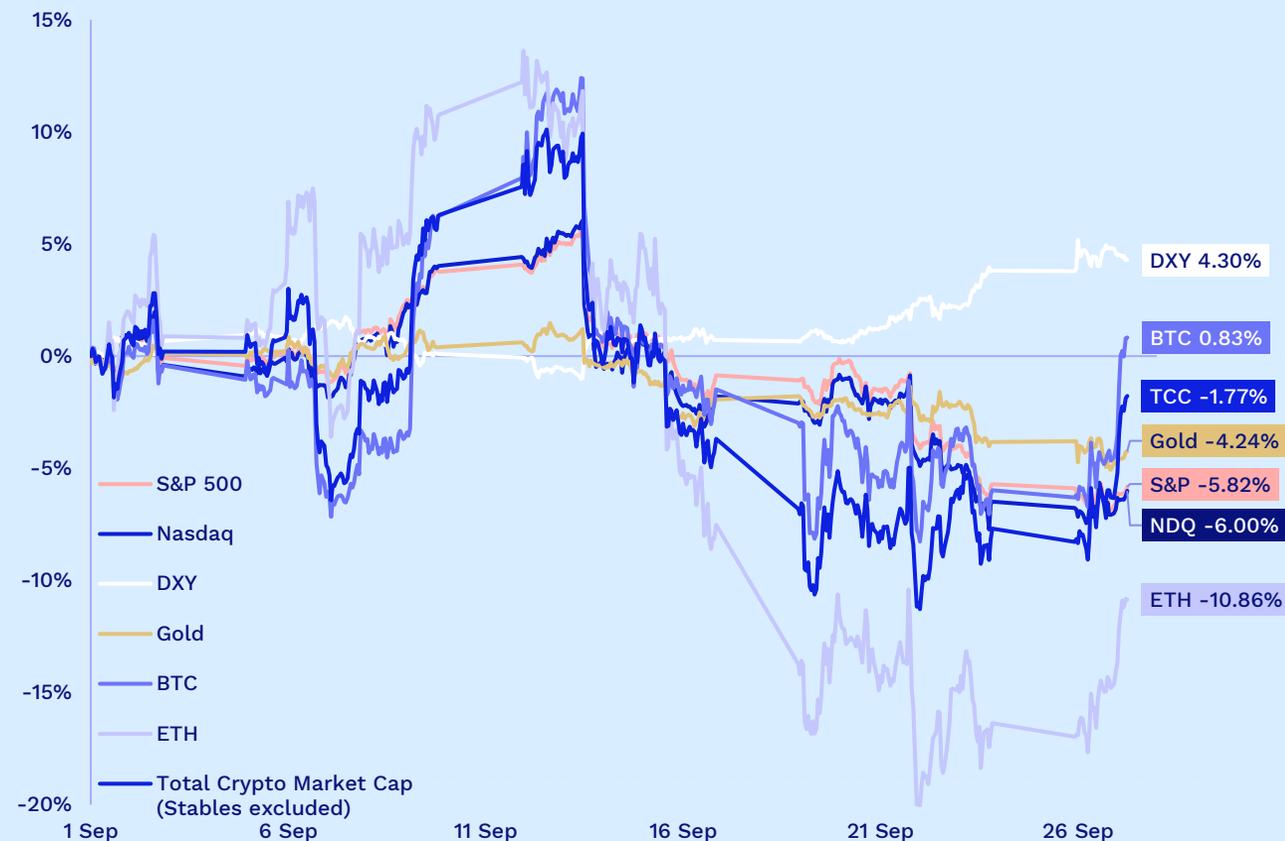
- Bitcoin regained \$20k Tuesday morning as June lows hold for now.
- Futures premiums remain extremely low, as the morning recovery contributes little to improving the market risk appetite.
- Funding rates are neutral for the first time since September 13th, while open interest has pushed to new highs.

3

Blockchain Activity

- Bitcoin's on-chain activity has been depressed this entire year. We saw a slight rebound in the on-chain activity one week ago, but it's now back to its depressing normal.
- At the start of the year, many analysts expected USDC to overtake USDT's position as the largest stablecoin by market cap. This has not unfolded, and USDT is still by far the most dominant stablecoin.

MTD performance, September: Various assets



Source: Tradingview

A green end to September

- After an uplifting Tuesday morning, BTC sees a positive seven day-return of 3% in what's been a volatile week in global financial markets. We've witnessed a considerable plunge in the British Pound and yet another hawkish FOMC.
- BNB (5%) again outperformed BTC and ETH (1%) this week. This has been a theme throughout the year. BNB has seen strong relative YTD performance, with yearly returns of -46% compared to ETH's -63% and BTC's -56%. BNB seems to benefit from growing Binance dominance and less downward pressuring backlash following the crypto credit crisis in June, as neither Celsius nor 3AC held significant exposure to the asset.
- BTC's 90-day correlation to the S&P 500 is declining. However, we see that short-term correlations are on an uptrend caused by important market-moving macro events in September.
- XRP is this week's top performer after experiencing a volatile week peaking at \$0.55 before falling to \$0.47. From December 2020, Ripple Labs have been charged by the SEC with violating the securities law. The SEC and Ripple filed for a summary judgment on Sep 18, which might eliminate uncertainty in XRP.

Last week of top 50 by market capitalization

Best Performing	Price	Last week	Last month	YTD
XRP	0.47	22.1%	40.7%	-43%
Uniswap	6.54	19.3%	7.7%	-59%
Algorand	0.37	15.5%	26.4%	-76%

Worst Performing	Price	Last week	Last month	YTD
Terra Luna Classic	0.00028	-10.9%	105.9%	-100%
Cosmos Hub	14.39	-8.2%	27.8%	-63%
EOS	1.21	-7.4%	-22.0%	-75%

Source: CoinGecko, messari.io

Bitcoin Correlation:

90-day correlation (weekly change included)	ETH		GOLD		S&P500	
BTC	0.833	0.001	0.345	0.024	0.590	-0.030

Source: CoinMetrics

Top 3 by Market Cap: Percentage Change in Price Over the Last Week



Source: Tradingview (Coinbase, Binance US)



A flat September

September is coming towards an end. This month has historically been the weakest for the crypto market. However, September 2022 is shaping up to become a flat month for the market.

- The Mid Cap index has seen 4% gains in September and is this month's best performer.
- Bitcoin is the second-best performer seeing a slight 1% gain. In September, BTC outperformed other major asset classes.
- Small Caps (-1%) follows in third while the Large Caps Index is the worst performer after falling 2% MTD.
- The main reason behind the Large Caps Index's weak performance is ETH's underperformance in September. ETH's market share peaked at 20.7% in late August, fueled by optimism in advance of the merge.
- The merge proved to be a sell-the-news-event, and ETH has kept underperforming relative to the rest of the crypto market, particularly BTC. This underperformance has led its market dominance to decline to 17.4%.
- During the past weeks, stablecoins have seen considerable growth in their market shares due to crypto traders reducing their risk exposure. This trend has reversed over the past seven days, as USDT, USDC, and BUSD all see declines in their market shares.

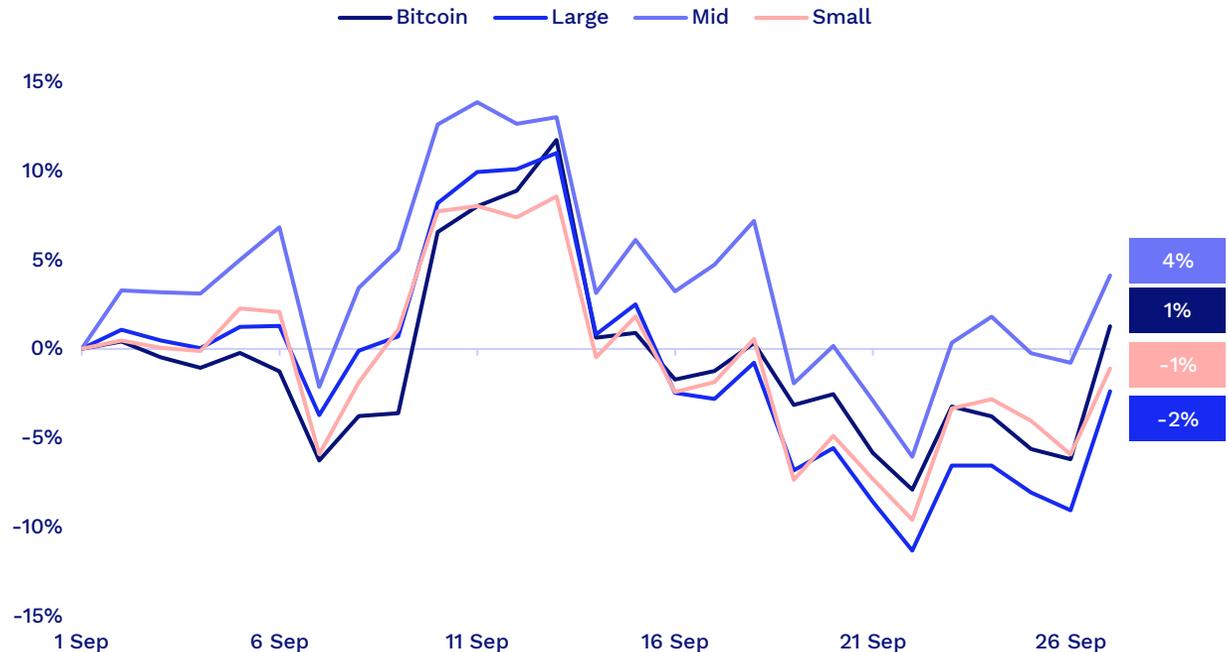
Percentage of Total Market Capitalization

	BTC	ETH	USDT	USDC	BNB	XRP	BUSD	ADA	SOL	DOGE
Market Share	39.80%	17.44%	7.02%	5.09%	4.74%	2.44%	2.17%	1.62%	1.26%	0.85%
Weekly Change	0.17%	-0.34%	-0.23%	-0.26%	0.07%	0.44%	-0.02%	-0.02%	0.04%	0.02%

* Weekly change in percentage points

Source: CoinMarketCap

Monthly Performance of Market Cap-Weighted Indexes



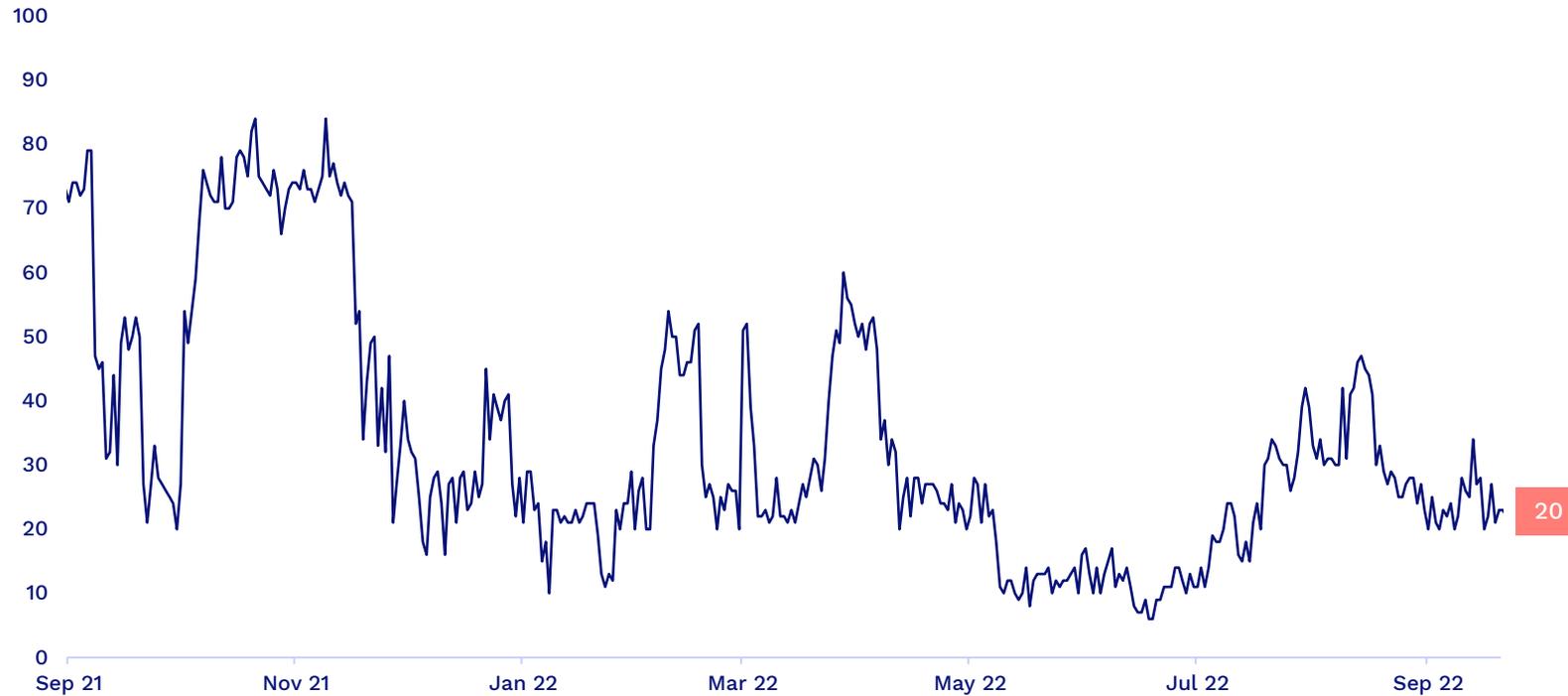
Source: Bletchley Indexes, Tradingview (Coinbase)



The fearfulness among crypto market participants continues

The crypto market's longest streak of fearfulness in history continues. Today marks the 178th day in the fearful territory, as shown by the Fear and Greed Index. In addition, social media sentiment indicates that market participants rarely have been this bearish, even during this bear market. Historically in financial markets, being greedy when others are fearful has been a good strategy, but it's important to be aware that the fearful market sentiment can last much longer.

Fear and Greed Index



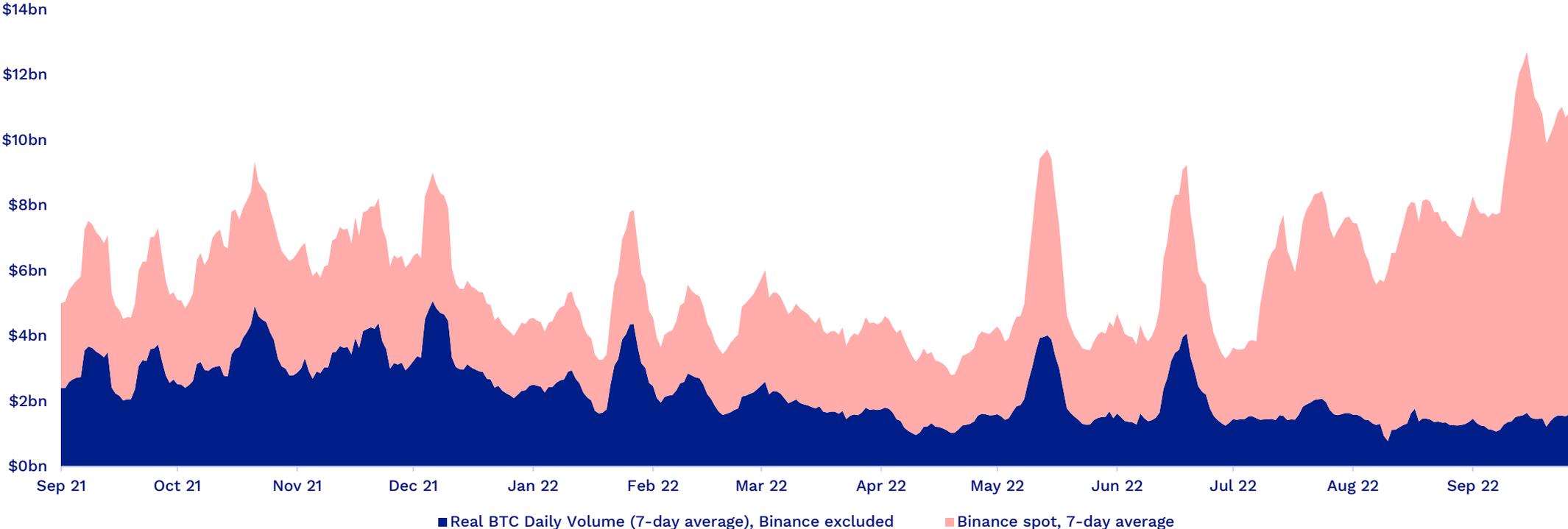
Source: Alternative.me



The bitcoin spot volume stays elevated

The elevated activity in the bitcoin spot markets continues, with the 7-day average spot volume sitting at \$10.9 billion. This volume corresponds to a slight decline from the yearly high of \$12.7 billion, which took place earlier this month. Such high activity in the spot markets while the price increases is usually a bullish sign for bitcoin, as it indicates significant buying pressure in the market, which could contribute to lifting the price even higher.

Real BTC Daily Volume* (7-day average)



Source: Skew, Tradingview (Binance, Binance US, Bitfinex)

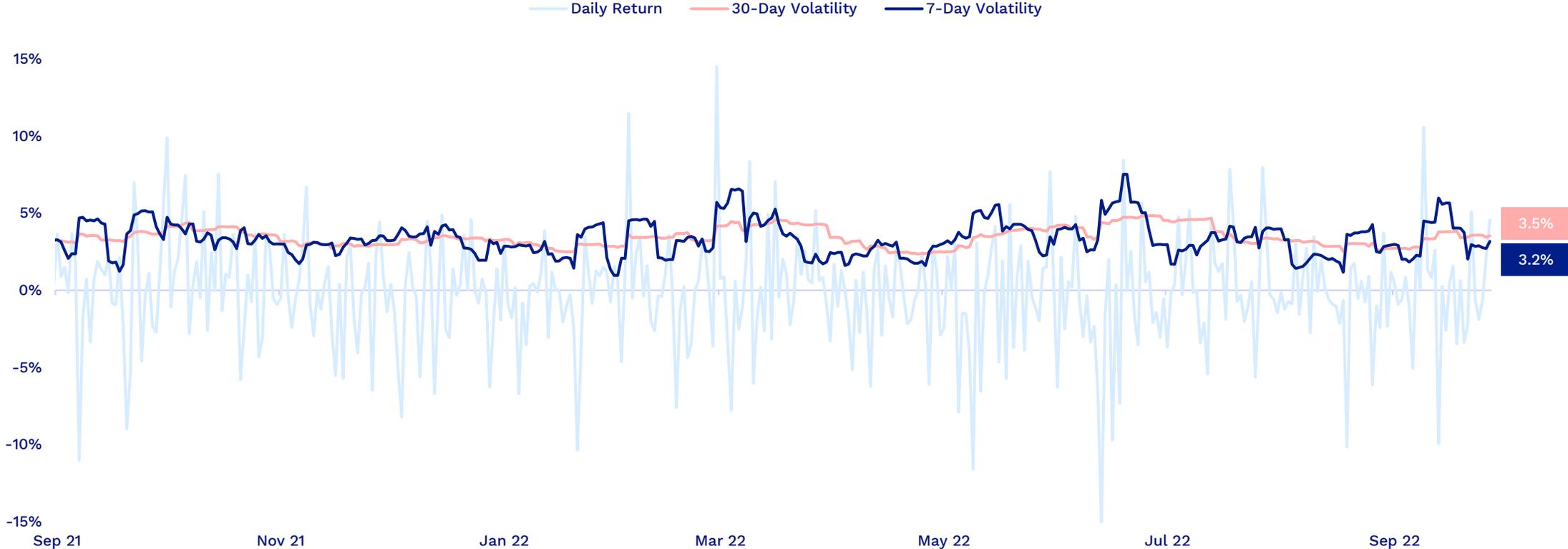
*Includes Bitwise 10 exchanges, LMAX, FTX



Bitcoin's volatility stays just below its historical average

After the initial volatility burst at the beginning of September, the bitcoin price has hovered between \$18.5k and \$20k. This price stability has led the 7-day volatility to fall to 3.2%, slightly below its historical average of 3.7%. Last week we warned that last Wednesday's FOMC meeting could catalyze a volatility surge. This happened as we saw the highest hourly volatility during a FOMC meeting ever. Still, in this chart, we track daily price fluctuations, which were not impacted by the FOMC meeting, as the price quickly stabilized following the meeting.

BTC-USD Volatility



Source: Tradingview (Coinbase)

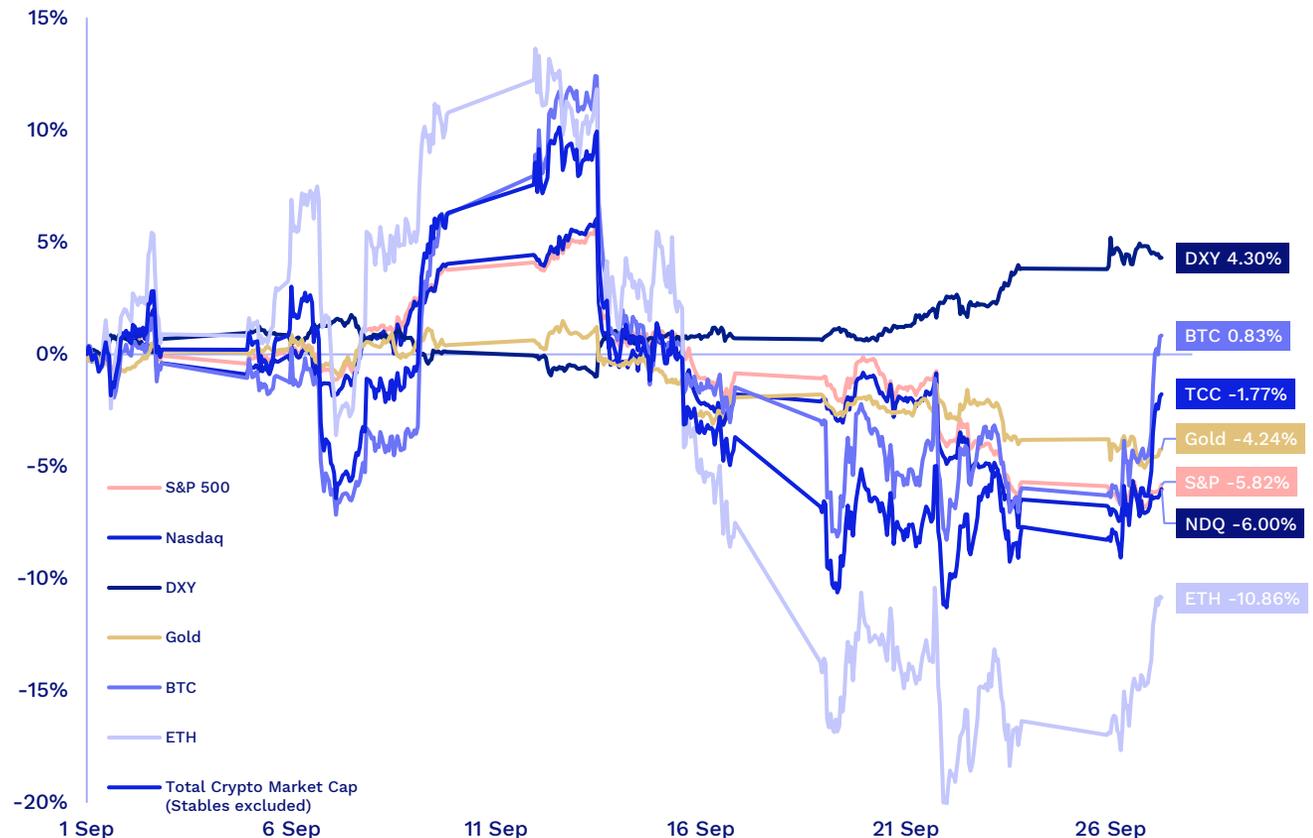


Bitcoin outperforming gold and equities in September

After Tuesday's morning relief in crypto, BTC is in the green in September, outperforming equity indexes and gold.

- BTC is up 0.8% in September versus the USD and has outperformed both U.S. indexes and gold.
- Among major macro indices, the dollar strength index (DXY) is the only index seeing better returns than BTC. However, BTC's performance is gauged versus the USD. Thus, while the dollar outperforms other major currencies, BTC has outperformed the USD this month.
- BTC's recovery has not happened in isolation. The total crypto cap excluding stablecoins (TCC in the chart) is the second-best performer in September, also outperforming major asset classes.
- The underperformance of the total crypto cap is caused by ether weakness in September. Ether is the worst performing asset among those included in this chart. Nevertheless, this is caused by hype being priced in ahead of the merge. In Q3 2022, ETH has outperformed all assets included in this chart and is up 26% from the quarterly open.
- Equities (SPX -5.8%, NDQ -6%) and gold (-4.2%) have struggled amid the tightening macro conditions and have seen lacklustre performance since the Sep 13th CPI surprise and the Sep 21st FOMC.

MTD performance, September: Various assets

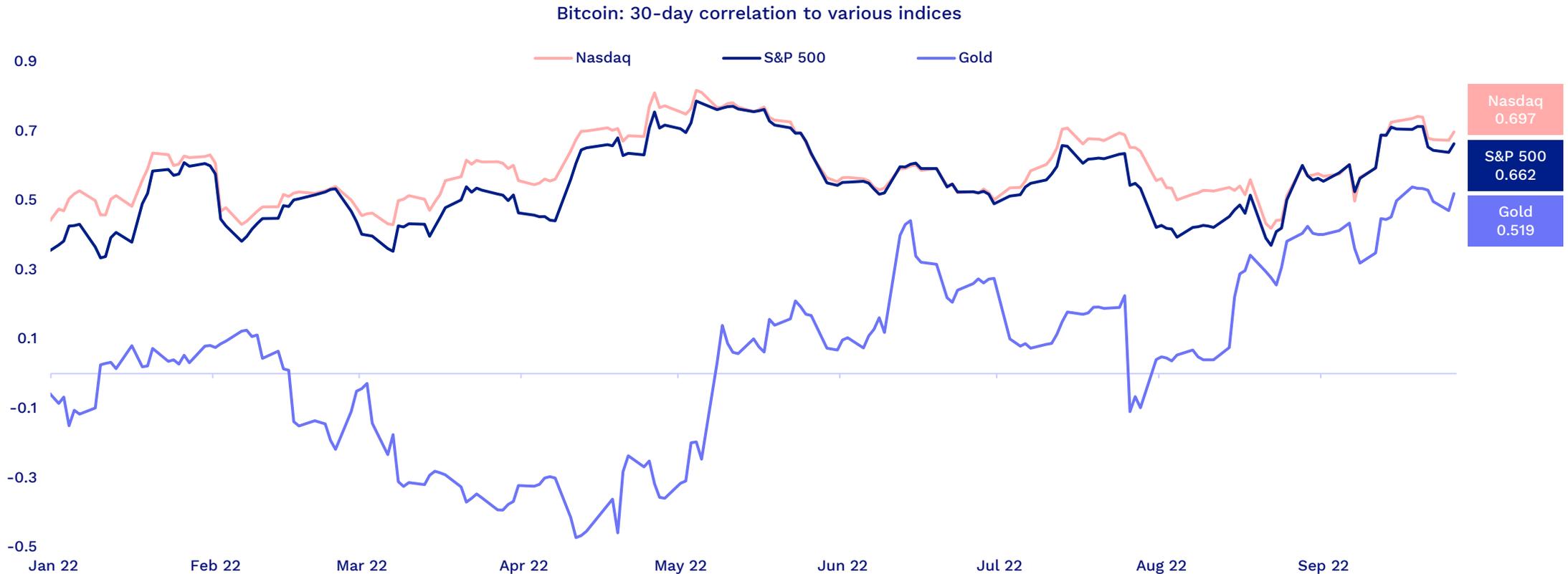


Source: Tradingview



Correlations climbing to June highs

While BTC has outperformed U.S. equities and gold in September, correlations are once again on a climbing trend. Following the CPI surprise and recent FOMC meeting, the 30-day correlation with Nasdaq and S&P 500 has grown to its highest level since early July, trailing near 0.7. Important macro events tend to coincide with surging correlations, as we illustrate in [the next slide](#). Interestingly, BTC's correlation to gold has also been growing in recent months, with the 30-day correlation with gold climbing to a yearly high of 0.52 this week.



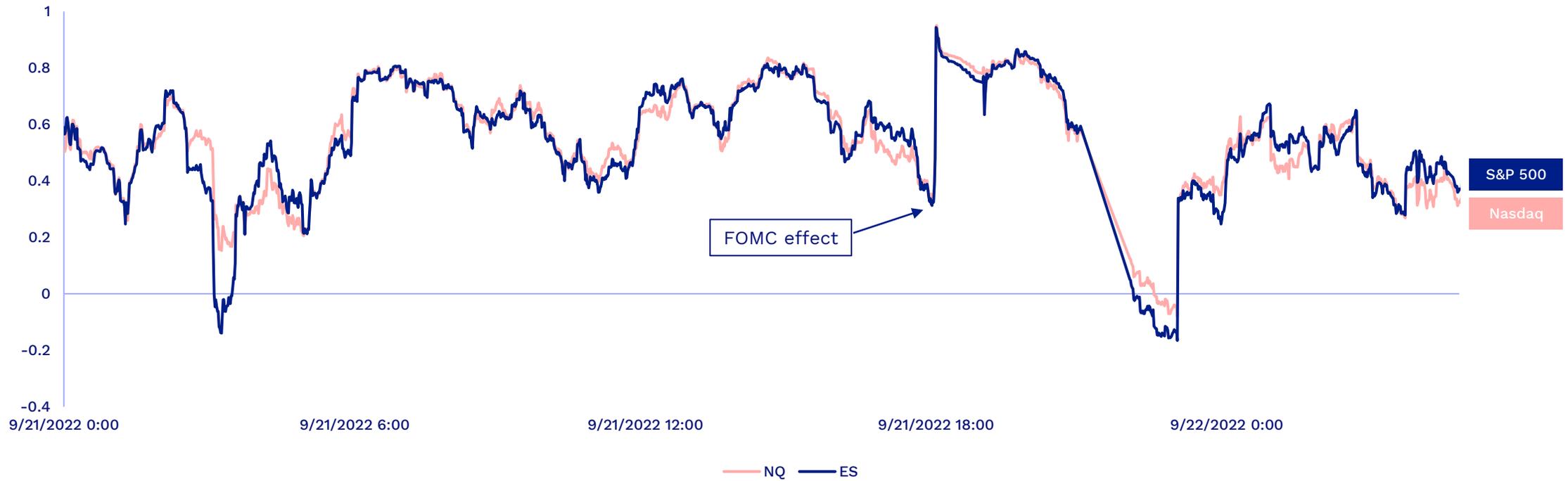
Source: Tradingview



Intraday correlation: The FOMC press conference was a correlation 1 moment

This chart is a visual representation of the FOMC effects to illustrate the extremely tight correlation between BTC and U.S. equities amid last week's FOMC press conference. The chart shows the 60-minute rolling correlation based on minute returns of BTC, S&P mini futures, and Nasdaq mini futures on September 21st. During the FOMC press conference, the rolling 60-min correlations between BTC and U.S. equities soared towards 0.95, showcasing how coordinated the market reaction is during important macro events. From the moment the FOMC statement is released to the press conference is wrapped up, risk assets tend to move as one coordinated organism. This illuminates why it's worth paying attention to important macro events, and you should already mark the September U.S. CPI release on October 13th and the next FOMC press conference on November 2nd in your calendar.

FOMC Meeting Minute-by-Minute Correlation, BTC vs. S&P mini futures and NDQ mini futures (60 min rolling)



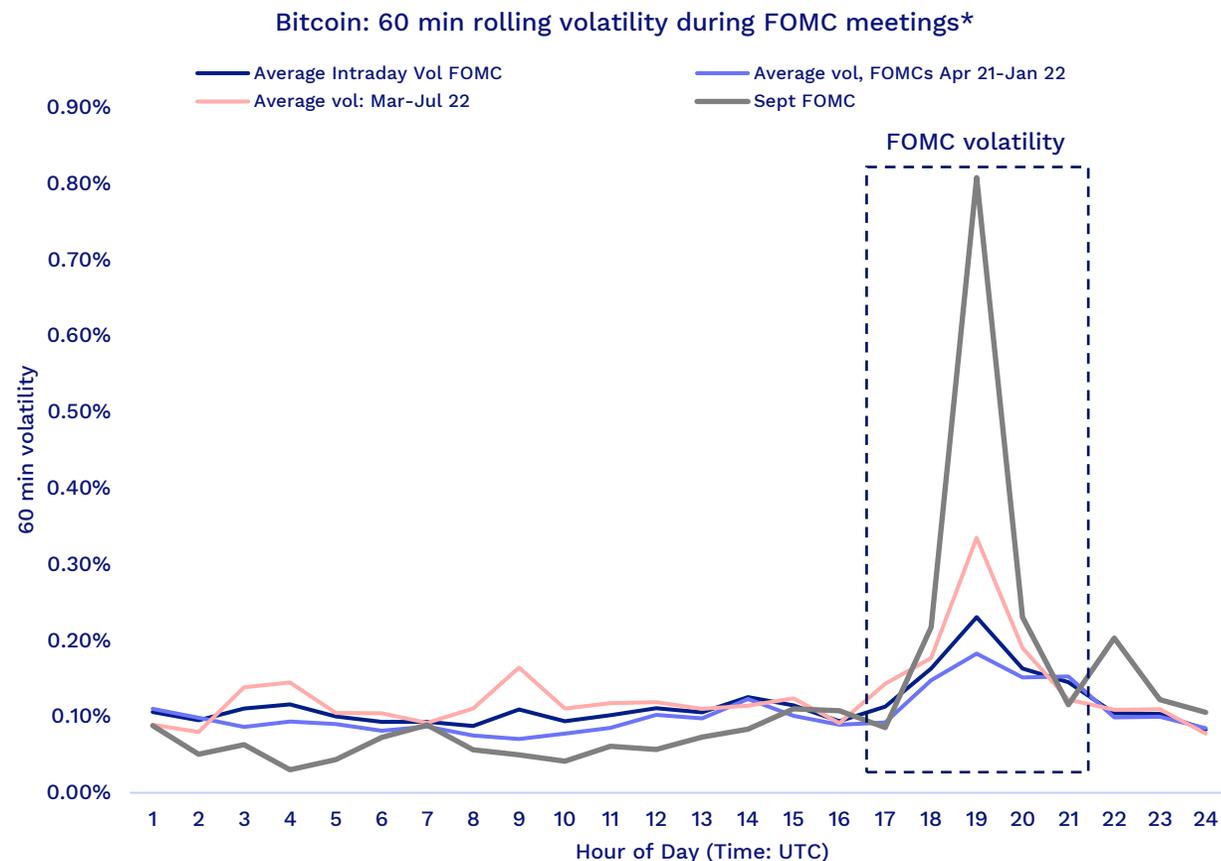
Source: Tradingview



Most volatile FOMC meeting ever

BTC's intraday volatility during last week's FOMC meeting reached new highs, with the average minutely price movement during the FOMC press conference soaring to 0.8% in the sixty minutes following the statement release.

- The Federal Reserve increased interest rates by 75bps, aligning with market expectations. However, the median forecast for the ensuing hiking process overshoot expectations leading to short-lived market mayhem in the minutes that followed the statement release.
- Bitcoin fell 5% in one minute after the FOMC statement was released and recovered by 2.7% in the next minute. The following hour remained volatile, with BTC's average minutely volatility reaching 0.8% during the FOMC hour, making this the most volatile BTC reaction to a FOMC statement ever.
- The FOMC made it clear that the Federal Reserve is fully committed to reaching the 2% inflation target, and the market should expect no near-term relief from a softening FED.
- BTC is thus likely to trade in a highly correlated environment during important macro releases in the coming quarter. Investors should be open to the idea that the crypto market will be constrained by the hiking and liquidity tightening cycle until the FED communicates that it's reached an appropriate restrictive interest rate level.



Source: FTX API (Minutely trade data during FOMC meetings)

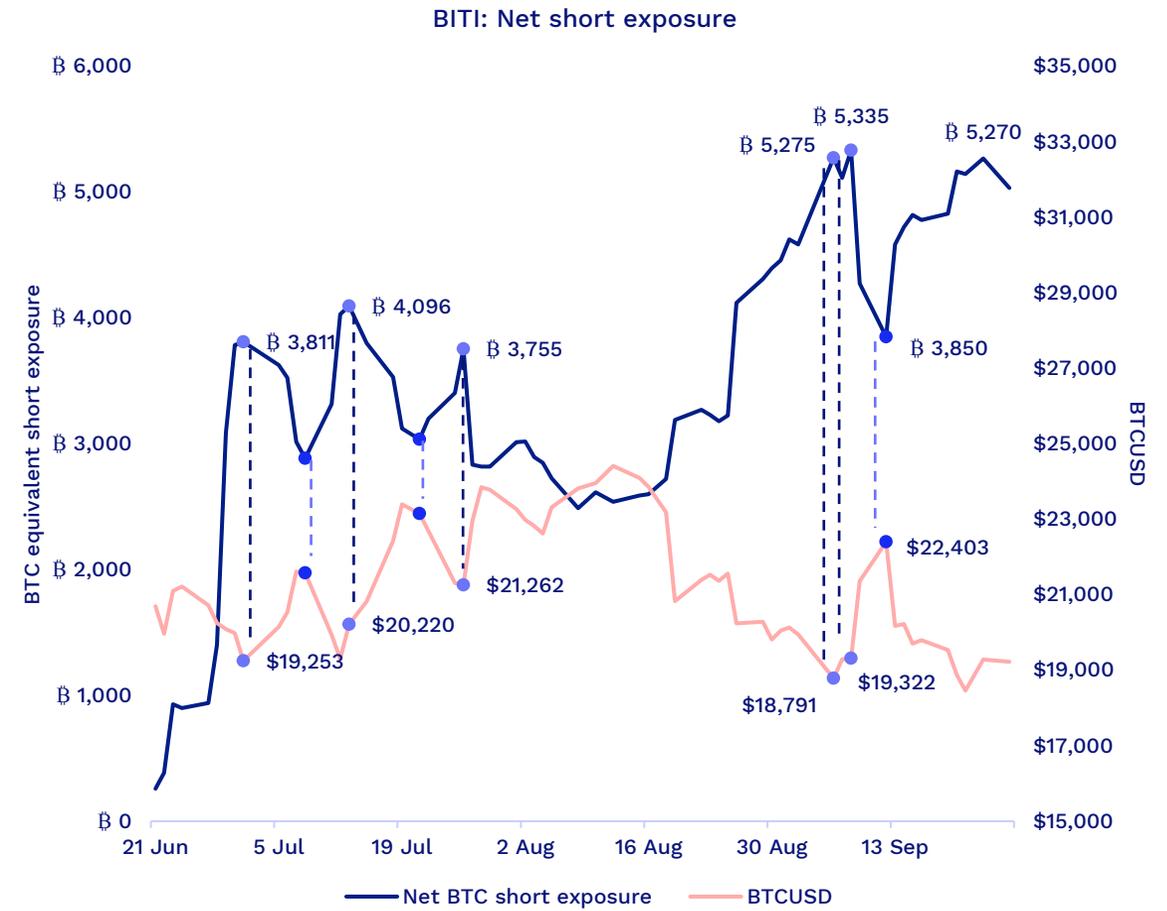
*Dates included: **2021:** Apr 28th, Jun 16th, Jul 28th, Sep 22nd, Nov 3rd, Dec 12th. **2022:** Jan 26th, Mar 16th, May 4th, Jun 15th, July 27th, Sep 21



Short ETF exposure nearing all-time highs

ProShares' short BTC ETF's AUM has climbed towards new highs as more traders seek to speculate on downside in BTC, with BTC trailing near range lows.

- On Friday September 23rd, BITI's BTC equivalent short exposure grew to 5,270 BTC. This is the third highest short exposure held by BITI since launching in June.
- From BITI, an interesting pattern has emerged. Spiking exposure tends to coincide with market bottoms, while sharply declining exposure tends to coincide with local price peaks.
- This either suggests that ETF traders on aggregate trade poorly in the ranging market, shorting near lows and closing near highs. However, the situation may be more intricate, with ETF flow directly impacting CME's basis with spill-over effects to the spot market. Thus, flows of BITI positions may also be a dynamic that leads markets to recover.
- BITI's exposure topped near a short equivalent of 4,000 BTC throughout the summer but has seen new highs above 5,000 BTC this autumn. Overall, this points in the direction of increased demand to make bearish bets on BTC.



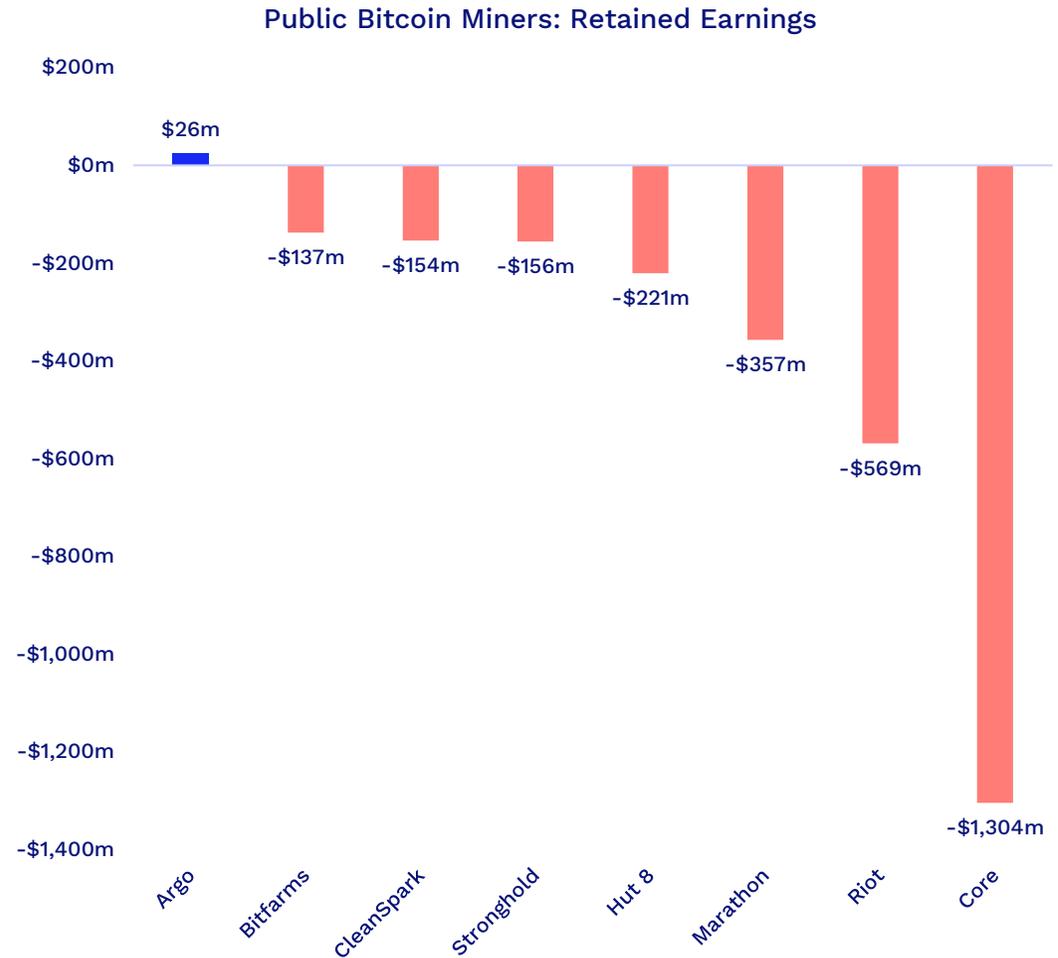
Source: Proshares, Tradingview (Coinbase)



Most public bitcoin miners have racked up losses in their lifetimes

The financial statements of public bitcoin mining companies look grim, revealing that most of them have lost money in their lifetimes.

- Retained earnings is an accounting term showing a company's accumulated net income in its lifetime. Most public miners have retained earnings deeply in the negative, signaling that they have lost money over the years.
- Last week, we explained how much the public mining companies spend on administrative activities. This spending, along with unfavorable investments in bitcoin and overexpansion during the bull run in 2021, has led their retained earnings to go deep in the negative.
- What is the most interesting is that these enormous accumulated deficits come after the super-profitable 2021, where the miners had the chance to rake in enormous profits. At the bull market's peak in November, a miner using an energy-efficient machine could generate bitcoin worth \$544 per MWh while buying an MWh for around \$40, pocketing the 1,260% margin. This margin has shrunk to 85%, which is not that high considering that it should cover other operating expenses like salaries and equipment depreciation.
- Core Scientific has the biggest accumulated deficit, losing \$1.3 billion in its lifetime as a company. Most of this loss stems from an impairment of goodwill related to the acquisition of bitcoin mining company Blockcap in July 2021. Core bought Blockcap for \$1.2 billion, of which total identifiable net assets made up only \$142 million. This possible overpaying for Blockcap has, along with other factors, resulted in Core booking an impairment of goodwill of \$788 million.
- If bitcoin mining companies have managed to lose money even after the mining bull market of their lifetimes in 2021, it should serve as a warning signal that costs may be out of control in some of these companies. In addition, these companies were not prepared for a bear market due to overexpanding and taking on too much risk during the bull market. Adopting proper risk management strategies and reducing administrative costs should be top priorities for these companies going forward.



Source: All these companies' Q2 2022 reports





Valuation



BTC regains \$20k, but conditions stays choppy

Bitcoin regained \$20k Tuesday morning as June lows hold for now.

- BTC holds firm within its choppy trading range, and promising Tuesday trading activity has pushed the prices above \$20k.
- Bitcoin stays within its 3-month long consolidation range between \$17.5k and \$25k and found support last week at \$18k and has yet to retest June lows.
- Towards the downside, BTC has strong support in the lower \$19,000 area. This appears to be a strong accumulation area for BTC, with a relatively strong bid, leading BTC to maintain relative strength during a tumultuous macro week.
- BTC is currently trading in a resistance area. BTC struggled to push beyond the \$20,500 area in July and early September. However, previous breakouts have sent BTC towards the \$22,500 resistance, which should be the next level to eyeball if BTC maintains its short-term momentum.
- Nevertheless, in general, BTC has mostly stayed directionless in a very messy trading range since the June collapse, and structurally there is a lack of momentum in either direction.



Source: Tradingview (Coinbase)



No sign of relief in futures

Futures premiums remain extremely low, as the morning recovery contributes little to improving the market risk appetite.

- CME traded most of the last week in backwardation, caused by growing inflows to BITI, as traders positioned for further downside in BTC.
- The offshore basis has stayed flat over the last week, seeing a slight premium of 1%.
- In sum, there are few notable changing tendencies in the futures market. Premiums remain extremely low, and the general risk appetite in the market stays muted.

Bitcoin Futures Annualized Rolling 3-Month Basis



Source: Skew, Laevidas, Tradingview, CME

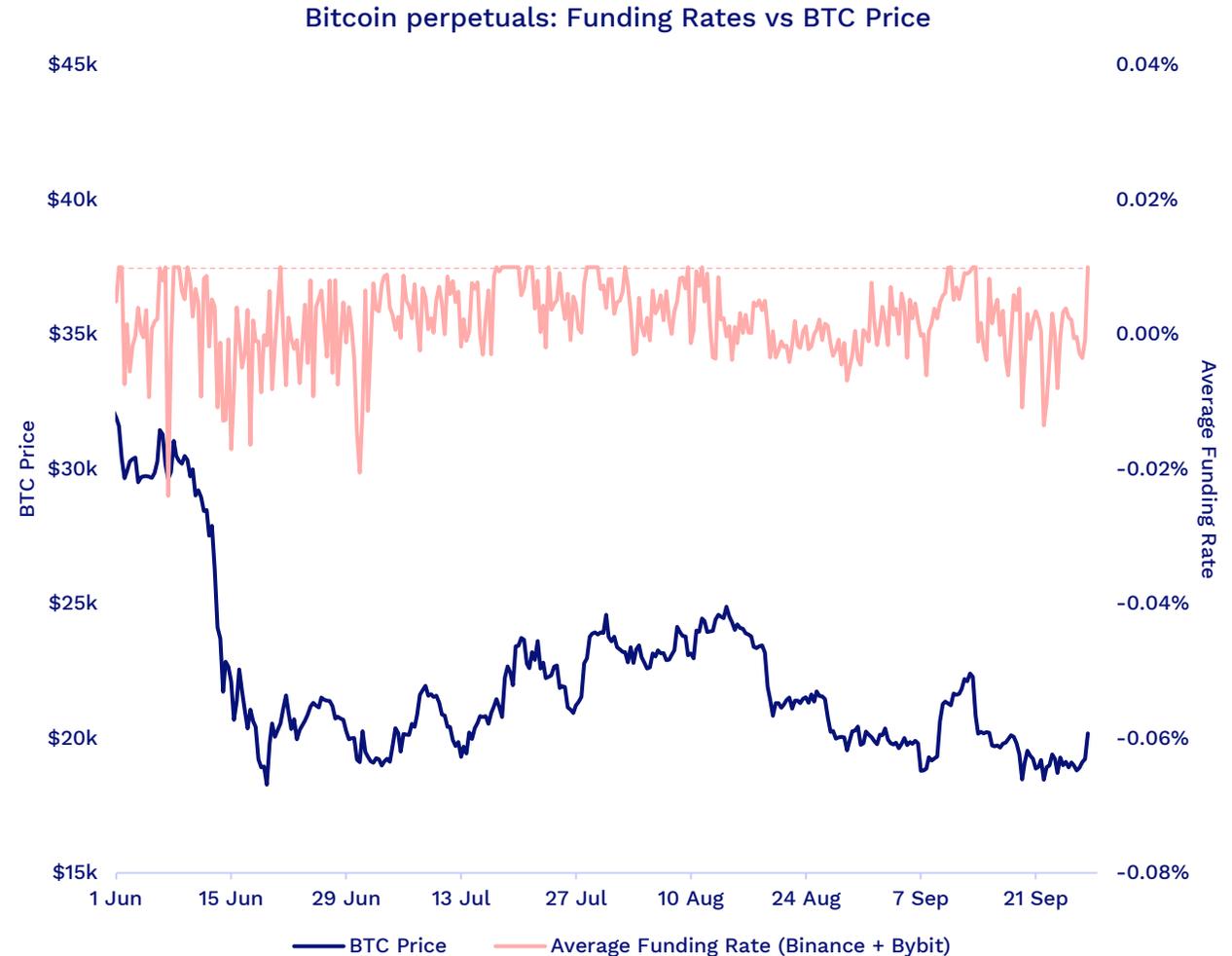
*Closed Saturday - Sunday



Tuesday morning strength sends funding rates to neutral levels

Funding rates are neutral for the first time since September 13th.

- Perps saw funding rates reach neutral levels for the first time in two weeks during the early Tuesday recovery.
- With BTC oscillating at \$19k, funding rates predominantly stayed negative, as few traders were willing to add long exposure, leading perps to trade at a discount to spot continuously.
- Some have noted that the Tuesday move seems to be fueled by a short squeeze. However, available data suggests that a short squeeze did not cause this move. Per [Coinglass](#), \$26m worth of shorts have been liquidated in BTC so far today, on par with the average short liquidation volumes in recent weeks.
- Binance and Bybit have reduced access to liquidation data, so Coinglass' data understates the actual liquidation volumes. Still, Binance's OI has grown amid the early hours today, as has Bybit's. Thus, this move seems not to be fueled by shorts getting squeezed but rather more longs entering the market or a spot-driven reaction.
- Funding rates have mostly been negative since the crypto credit crisis in June and have been neutral to below neutral since December 4th, 2021.
- Still, while the perp regime bears a resemblance to the 2018 bear market, it's also very different. The prolonged neutral to below neutral regime differs from 2018, but funding rates have also reached far less extreme lows now compared to the 2018 bear market.



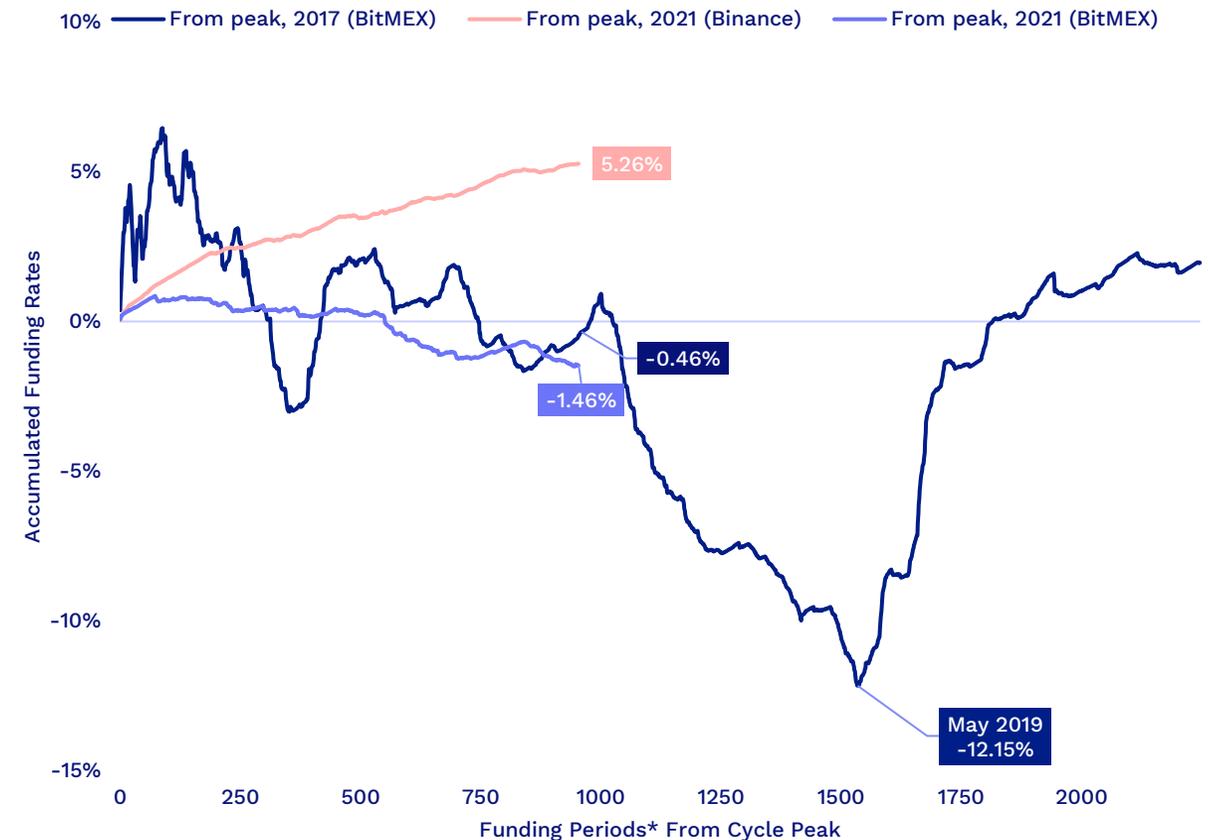
A different kind of bear market?

Comparing 2018 funding rates to the current regime

Perps behave very differently during the 2022 bear market compared to 2018. In 2018, funding rates periodically pushed above neutral levels, while the negative extremes were far lower than in the current bear market.

- Funding rates on Binance have remained neutral to below neutral since December 4th. But how does the current funding regime compare to the 2018 bear cycle? We compare accumulated funding rates from the 2017 cycle peak to the funding rates from the 2021 cycle peak.
- Since November 10th, a short in Binance's BTCUSDT perp would've yielded 5.26% to shorts. In other words, while funding rates have never been above neutral, longs have still paid shorts.
- BitMEX dominated the derivatives market in 2018. 318 days after the 2017 peak, the accumulated BitMEX funding rates reached -0.46%, albeit in a far more volatile manner compared to the funding rate regime of today. Thus, during the 2018 bear, shorts tended to pay longs on aggregate.
- Derivatives are complex, and funding calculations vary across derivatives instruments, and in this instance, even the collateral structure of the derivatives. Thus, to compare like for like, we've included the 2022 funding rates of BitMEX's inverse perp in the chart. Since the 2021 peak, BitMEX's perps have yielded an accumulated funding rate of -1.46%, lower than the funding rates yielded in the first 318 days of the 2018 bear market.
- Nevertheless, BitMEX currently represents 3.3% of the open interest in perps versus >50% in the 2018 bear market. BitMEX is less relevant than it once was.
- BitMEX's accumulated funding rates from the cycle peak bottomed at -12.15% in May 2019. Then, funding rates were far more extreme than today. While funding rates currently tend to float below neutral terrain, deeply negative funding rates of -0.375% were typical in the more nascent derivatives market in 2018 and 2019. More efficient market makers and a more efficient market in general likely contribute to less extreme downward pushes in funding rates, in addition to balancing funding rates at neutral levels of 0.01%.

Comparing Accumulated Funding Rates From Two Cycle Peaks



Source: Skew, BitMEX

*3 Funding Periods per day





Blockchain Activity



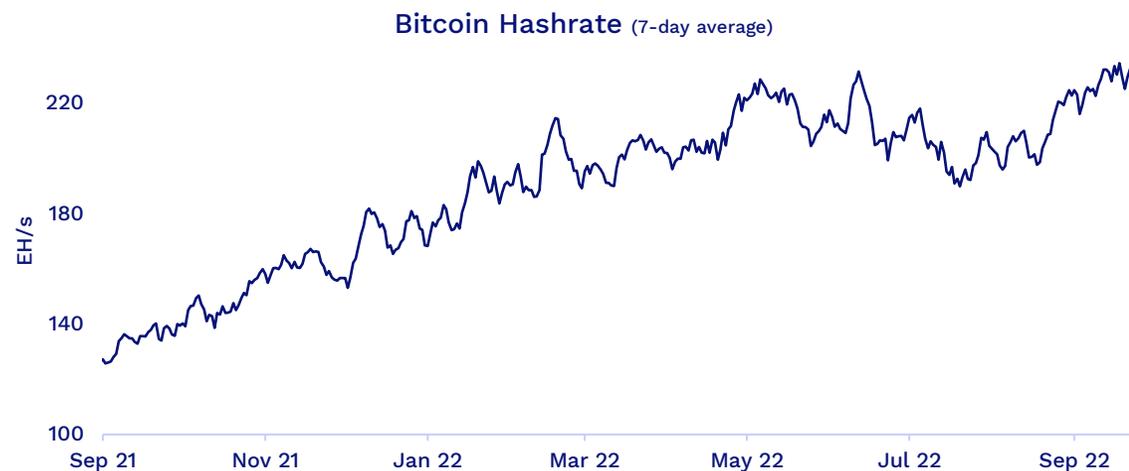
Bitcoin's on-chain activity falls back to its depressing normal

Bitcoin's on-chain activity has been depressed this entire year. We saw a slight rebound in the on-chain activity one week ago, but it's now back to its depressing normal.

- We can look at two primary metrics to get a high level overview of on-chain activity: the number of active addresses and the daily transaction fees. Active addresses indicate how many individual users transact on the network, while transaction fees per day are a proxy for the demand for using the network.
- Both these metrics are down significantly over the past seven days. We mainly see a massive 19% decline in the transaction fees per day, and they are currently sitting at only \$254k – a very low level historically.
- The transaction fees have plummeted due to limited demand for block space. The daily transaction volume fell by 39% over the past seven days and now sits at only \$3.1 billion. This is due to a 38% reduction in the average transaction value, which is now only \$12k.
- In general, the lower on-chain activity can be ascribed to a bump in on-chain activity during the past two weeks caused by the merge. It was the biggest happening in several years in crypto, naturally leading to increased on-chain activity. With this event in the rearview mirror, activity returns to its depressed “normal”.
- The Bitcoin network will reduce its mining difficulty by 2.1% tomorrow. A highly welcomed reduction by the bitcoin miners, who have seen their revenues plummet lately. Bitcoin mining revenues also continue falling and are now only \$17.2 million per day, far from the November highs of \$62 million.

Powered by:		Bitcoin Network Data			
BYTETREE		9/26/2022	7d prior	7d Change	30d Trend
Network	Daily Miner Revenues	\$ 17,191,016	\$ 17,914,850	-4.04%	
	Fees per day	\$ 254,199	\$ 315,730	-19.49%	
	Fees % Revenues	1.48%	1.76%	-0.28%	
	Daily TX Volume (\$M)	\$ 3,085	\$ 5,023	-38.57%	
	Transactions per day	250,755	254,696	-1.55%	
Utility	Avg TX value \$	\$ 12,304	\$ 19,720	-37.61%	
	# Blocks per hour	5.94	5.91	0.50%	
	Avg. # TX per block	1,759	1,786	-1.55%	

Source: Bytetreer



Source: Blockchain.com

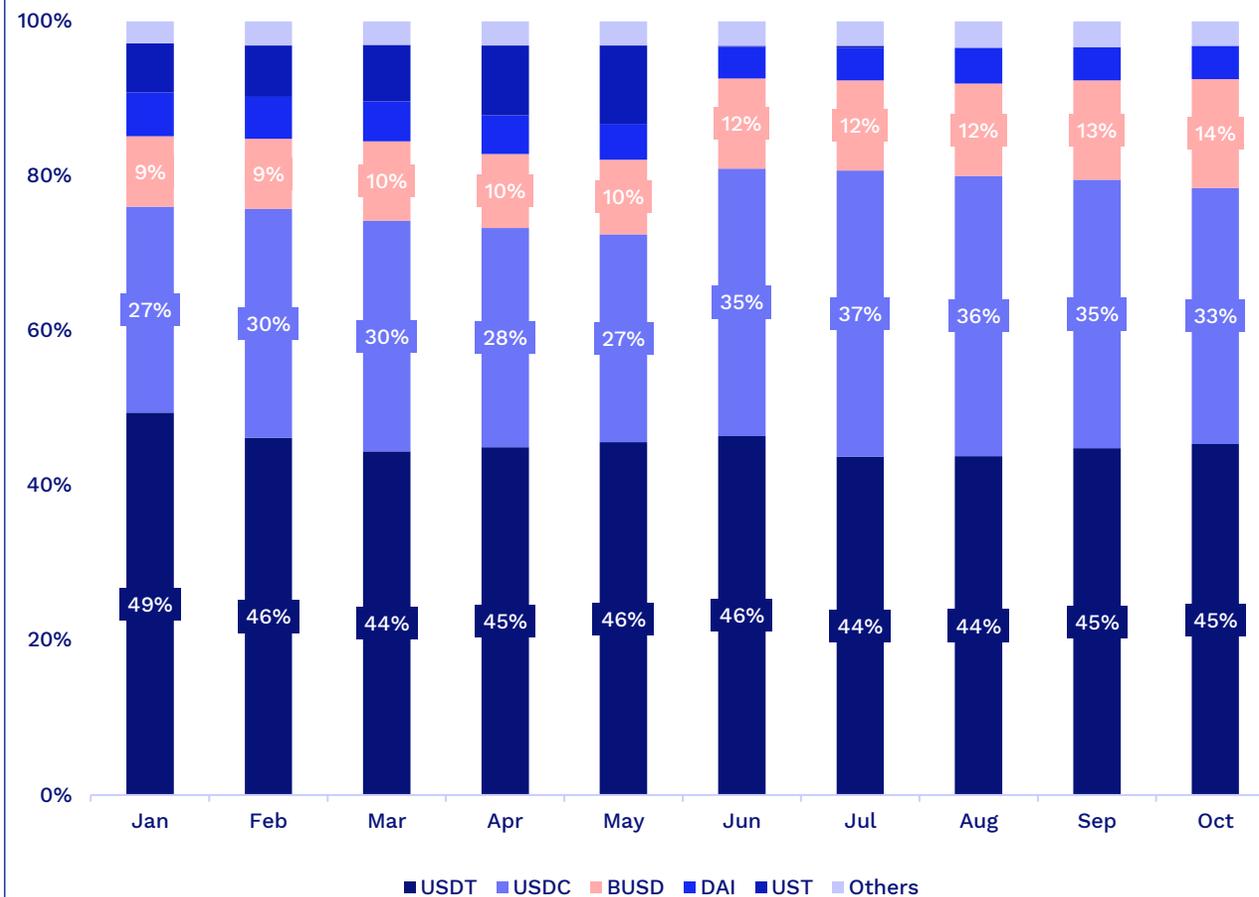


USDT still hangs onto the top position among stablecoins

At the start of the year, many analysts expected USDC to overtake USDT's position as the largest stablecoin by market cap. This has not unfolded, and USDT is still by far the most dominant stablecoin.

- USDC ended 2021 strongly and held onto its momentum in the first five months of 2022, increasing its market share from 27% at the start of the year to 35% in June. USDT has continued last year's trend of slowly but surely losing market share, starting the year at 49% and now sitting at 45%.
- Most of USDC's growth came during the algorithmic stablecoin UST's collapse in May, which led many previous UST holders to move the remainder of their funds into the more stable and regulated USDC. USDC is the most popular stablecoin for yield generation in DeFi applications, attracting a similar (but hopefully more conservative) user base than UST.
- USDC saw solid growth until June but has since stagnated. It now makes up 33% of the stablecoin market. Many analysts, including us, estimated at the start of 2022 that USDC would overtake USDT's position as the largest stablecoin by market cap in 2022, but that looks increasingly unlikely.
- While USDT lacked momentum at the start of the year, it looks like it has found it back recently. During the last 30 days, USDT's market cap has grown by 1%, while USDC's has declined by 5.5%.
- During the past month, the exchanges Binance and WazirX removed smaller stablecoin pairs, including USDC. These decisions were likely made to funnel liquidity into Binance's stablecoin BUSD. BUSD has seen tremendous growth in 2022, as it only made up 9% of the stablecoin market at the start of the year and 14% now.

Development in Stablecoins' Market Shares in 2022



Source: CoinGecko, Messari



Disclaimer

- The Weekly Update (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 tbj@arcane.no





Provided by **arcane**
research