

The Weekly Update

Week 39, 2022



Provided by

arcane
research

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Market Update

- During the previous seven days, the crypto market has seen slight gains, with BTC up 3%, in a week influenced by GBP volatility, Credit Suisse liquidity concerns, and Nord Stream drama in Europe.
- During the previous seven days, the bitcoin price has mostly hovered in the narrow \$19k - \$20k range, leading the 7-day volatility to drop to 1.6%.
- British bitcoin trading volumes soared to new all-time highs last week as the GBP pushed to new all-time lows vs. the US Dollar.
- The GBTC discount reached its highest mark ever last week at 36.2%, a discount implying that GBTC will remain close-ended until January 2045.

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Valuation

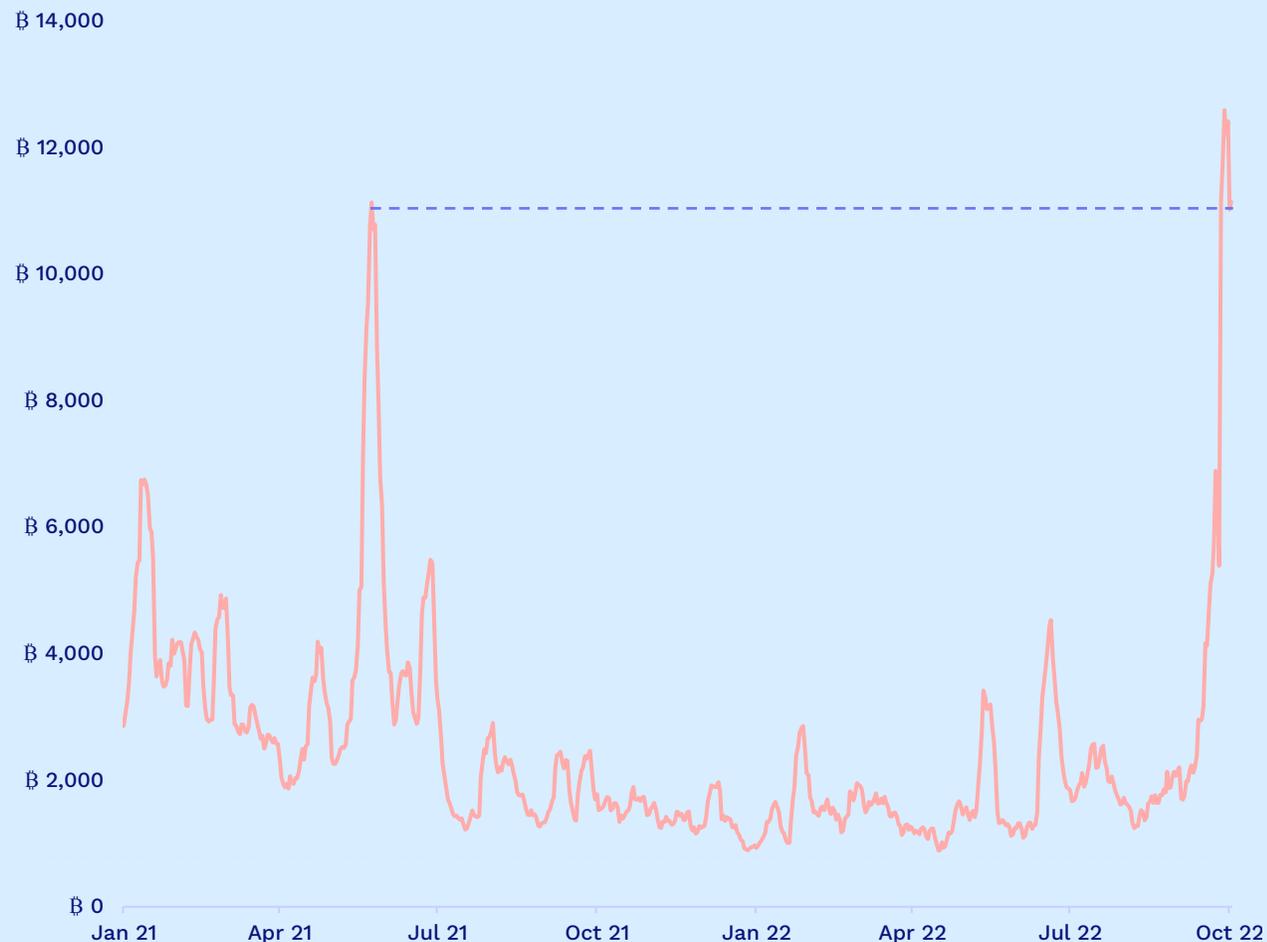
- Not much has changed since last week's analysis, as bitcoin battles the \$20k area once again. Can it finally flip the resistance level to support?
- The last three funding rate intervals on Binance have seen funding rates at neutral levels, while open interest has grown further, reaching yet another notional all-time high of 450,000 BTC.

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Blockchain Activity

- Bitcoin miners keep getting squeezed from several angles as the hashrate reaches an all-time high simultaneously as the bitcoin price stays depressed and energy prices soar.
- Bitcoin mining firms have seen massive reductions in their revenues. At the same time, their costs are fixed, leading to enormous margin compression.
- The combined capacity in public Lightning channels surpassed 5,000 bitcoin for the first time this Monday.

BTCGBP Trading Volume (7d MA)



Source: Tradingview (Binance, Coinbase, Kraken, Bitfinex, Bitstamp, Gemini)

Crypto market holding up strongly amid macro turmoil

- During the previous seven days, the crypto market has seen slight gains, with BTC up 3%, in a week influenced by GBP volatility, Credit Suisse liquidity concerns, and Nord Stream drama in Europe.
- In this backdrop of macro turmoil, the crypto market has held up strongly, as BTC has outperformed the stock market lately. Within the crypto market, BNB keeps outperforming and is up 5% over the past seven days. ETH (1%) underperforms relative to the two other biggest cryptocurrencies for the fourth week in a row.
- Correlations are also showing signs of loosening. Both within the crypto market and between bitcoin and U.S. equities. Bitcoin's 90-day correlation to Ethereum has fallen to its lowest level since December 2021. Alongside the declining ETH correlation, BTC's correlation to the S&P 500 has declined to levels not seen since August.
- Bitcoin's correlation to gold, on the other hand, is growing and currently sits at its highest level since November 2020. This is an interesting observation, as it suggests that investors have predominantly focused on securing dollar exposure as recession fear ravages in the broad financial markets.

Last week of top 50 by market capitalization

Best Performing	Price	Last week	Last month	YTD
Quant	140.28	16.7%	49.6%	-43%
Elrond	52.34	12.1%	2.7%	-59%
Uniswap	6.61	11.7%	4.9%	-76%
Worst Performing	Price	Last week	Last month	YTD
Chiliz	0.21963	-14.3%	1.0%	-100%
Cosmos Hub	13.03	-6.3%	3.2%	-63%
ApeCoin	5.22	-5.1%	10.0%	-75%

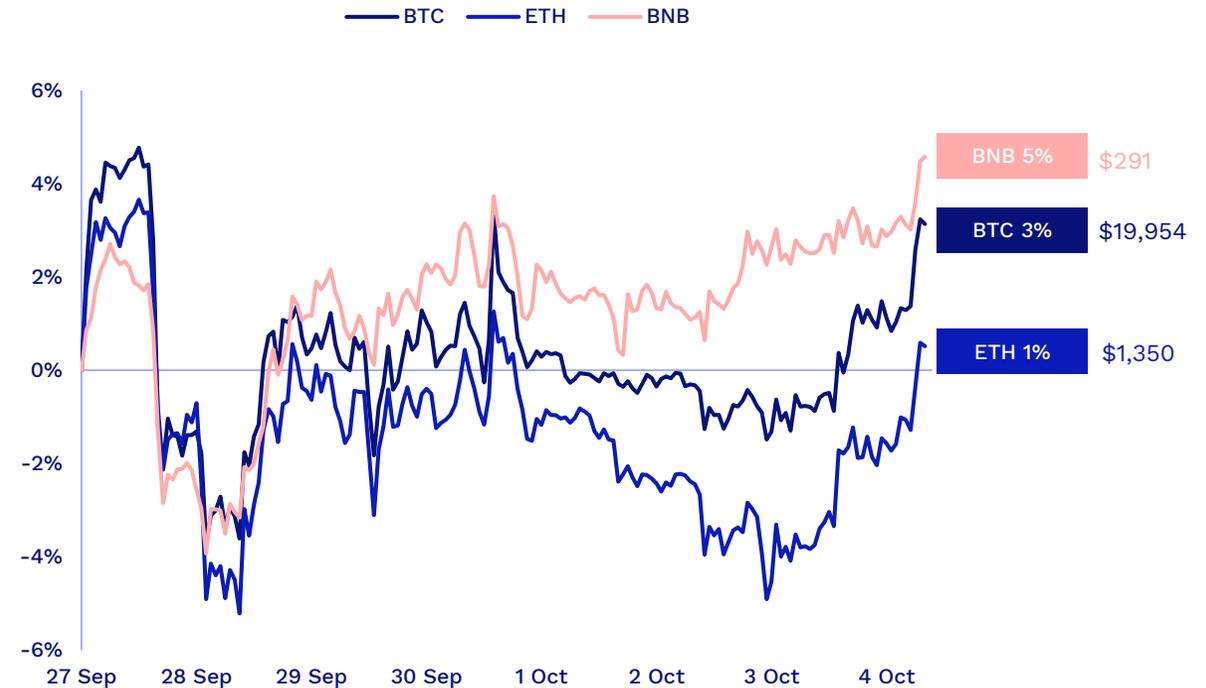
Source: CoinGecko, messari.io

Bitcoin Correlation:

90-day correlation (weekly change included)	ETH		GOLD		S&P500	
BTC	0.828	-0.005	0.327	0.024	0.550	-0.040

Source: CoinMetrics

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



Source: Tradingview (Coinbase, Binance US)



Bitcoin outperformed the stock market in September

Bitcoin outperformed the stock market in a September marked by macro turmoil. Is the digital gold narrative back?

- The Mid Cap Index is September's winner after keeping all its value throughout the month, followed by bitcoin (-2%) and the Small Cap Index (-3%). The Large Cap Index is the worst-performing after falling by 6% due to its second-biggest component, ETH, plunging after the merge.
- September was a weak month in the broad financial markets, with S&P 500 falling by 8% and Nasdaq by 9%. Amid this macro turmoil, gold has held its value relatively well and fell by 3%, aligning with bitcoin's performance.
- During the previous two years, bitcoin has followed the stock market closely but with higher volatility. Given this dynamic, you would expect bitcoin to fall by much more than just 3% in a month when the stock market plummets.
- Bitcoin's recent outperformance of the stock market in a weak period gives some hope to investors clinging on to the digital gold narrative. The previous slide shows that bitcoin's correlation to gold has increased substantially lately and sits close to its highest level since 2020
- October has opened relatively flat for the crypto market, but bitcoin is slightly outperforming relative to the other indexes.

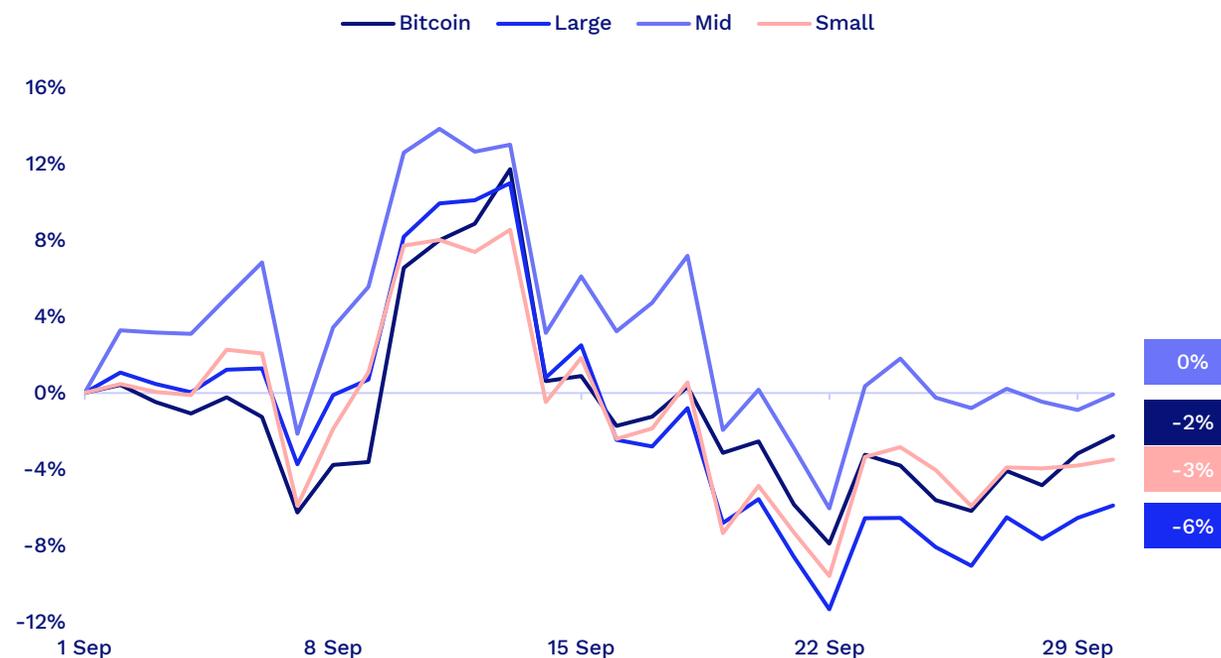
Percentage of Total Market Capitalization

	BTC	ETH	USDT	USDC	BNB	XRP	BUSD	ADA	SOL	DOGE
Market Share	39.97%	17.30%	7.12%	4.95%	4.90%	2.41%	2.21%	1.56%	1.25%	0.84%
Weekly Change	0.17%	-0.14%	0.10%	-0.14%	0.16%	-0.03%	0.04%	-0.06%	-0.01%	-0.01%

* Weekly change in percentage points

Source: CoinMarketCap

Monthly Performance of Market Cap-Weighted Indexes



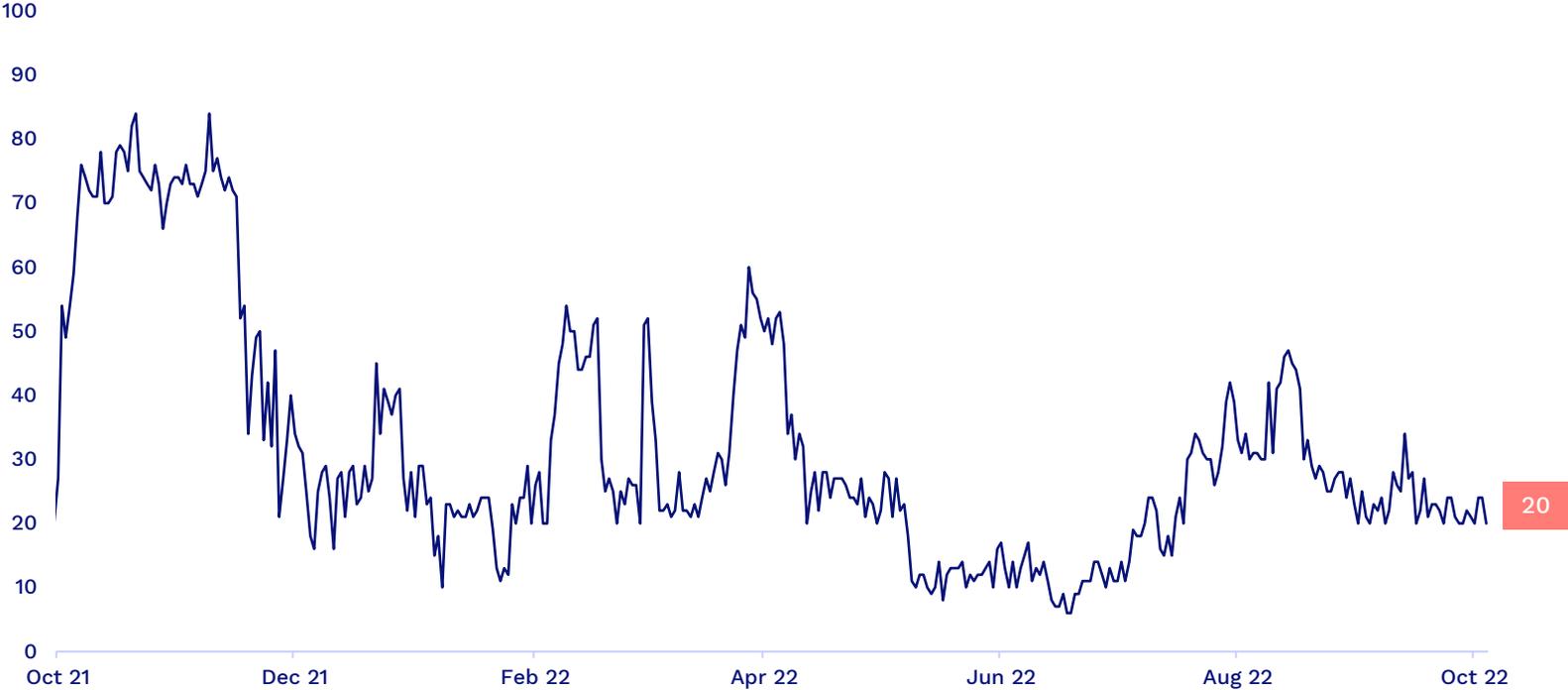
Source: Bletchley Indexes, Tradingview (Coinbase)



No anxiety relief in sight for crypto market participants

Since late August, the Fear and Greed Index has been remarkably stable at "extreme fear" levels. During this period, the bitcoin price stabilized at around \$19k with unusually low volatility. Historically, fearfulness in the crypto market has corresponded with high volatility, and we usually see greed increase as volatility settles. The recent fearfulness in such a low volatility environment indicates that market participants have an innate fear that we haven't seen the worst of this bear market.

Fear and Greed Index



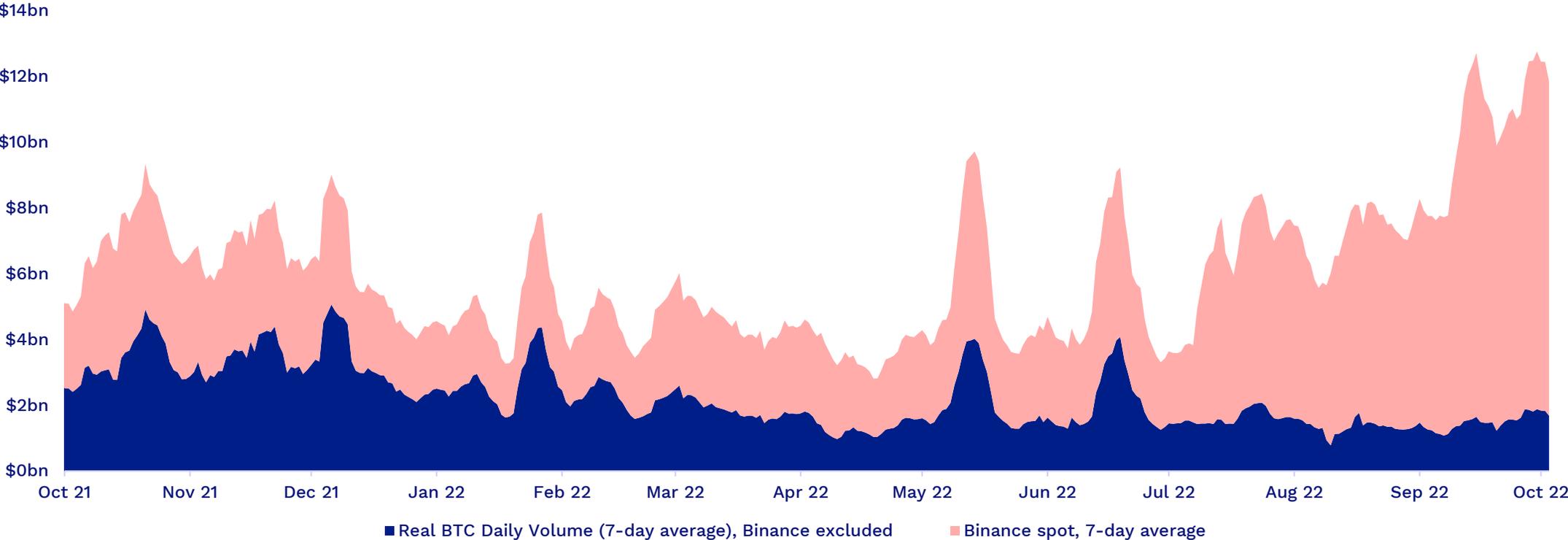
Source: Alternative.me



Highest bitcoin spot volume since May 2021

Bitcoin's trading activity keeps surging to new highs. The 7-day average bitcoin spot volume currently sits at \$11.8 billion but peaked at \$12.8 billion last week – the highest level since May 2021. Although most trading activity takes place at Binance, volumes have also been increasing on all the smaller venues lately. Bitcoin has traded with eminently low volatility recently, which is unusual in a period of such elevated spot volumes. We also see spot volumes in other currencies surging, particularly the British Pound.

Real BTCUSD Daily Volume* (7-day average)



Source: Tradingview

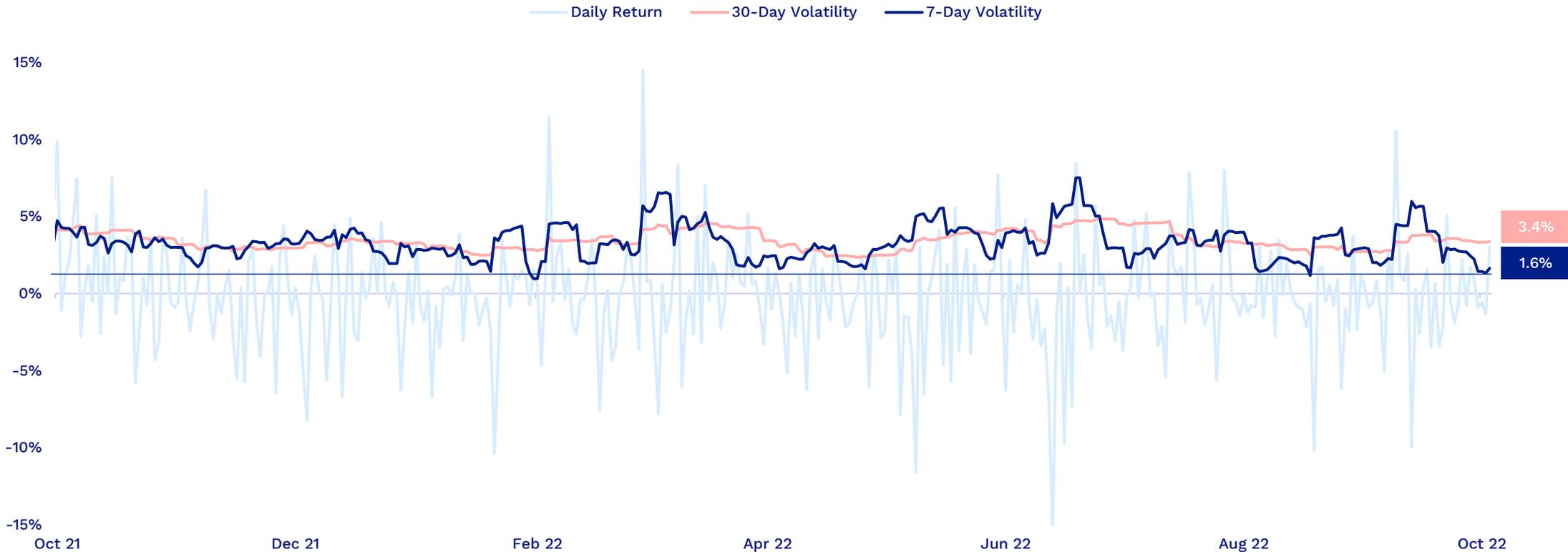
*Includes Bitwise 10 exchanges, LMAX, FTX



Bitcoin's volatility plunges - Brace for impact?

During the previous seven days, the bitcoin price has mostly hovered in the narrow \$19k - \$20k range, leading the 7-day volatility to drop to 1.6%. Historically, a significant volatility burst has followed when the 7-day volatility has fallen to such low levels. Low volatility periods have tended to allow leverage to build up in the system. This leverage can be skewed either to the upside or the downside, but in either case, it makes bitcoin vulnerable to significant price movements. This is further confirmed by the open interest in perpetual futures sitting close to an all-time high.

BTC-USD Volatility



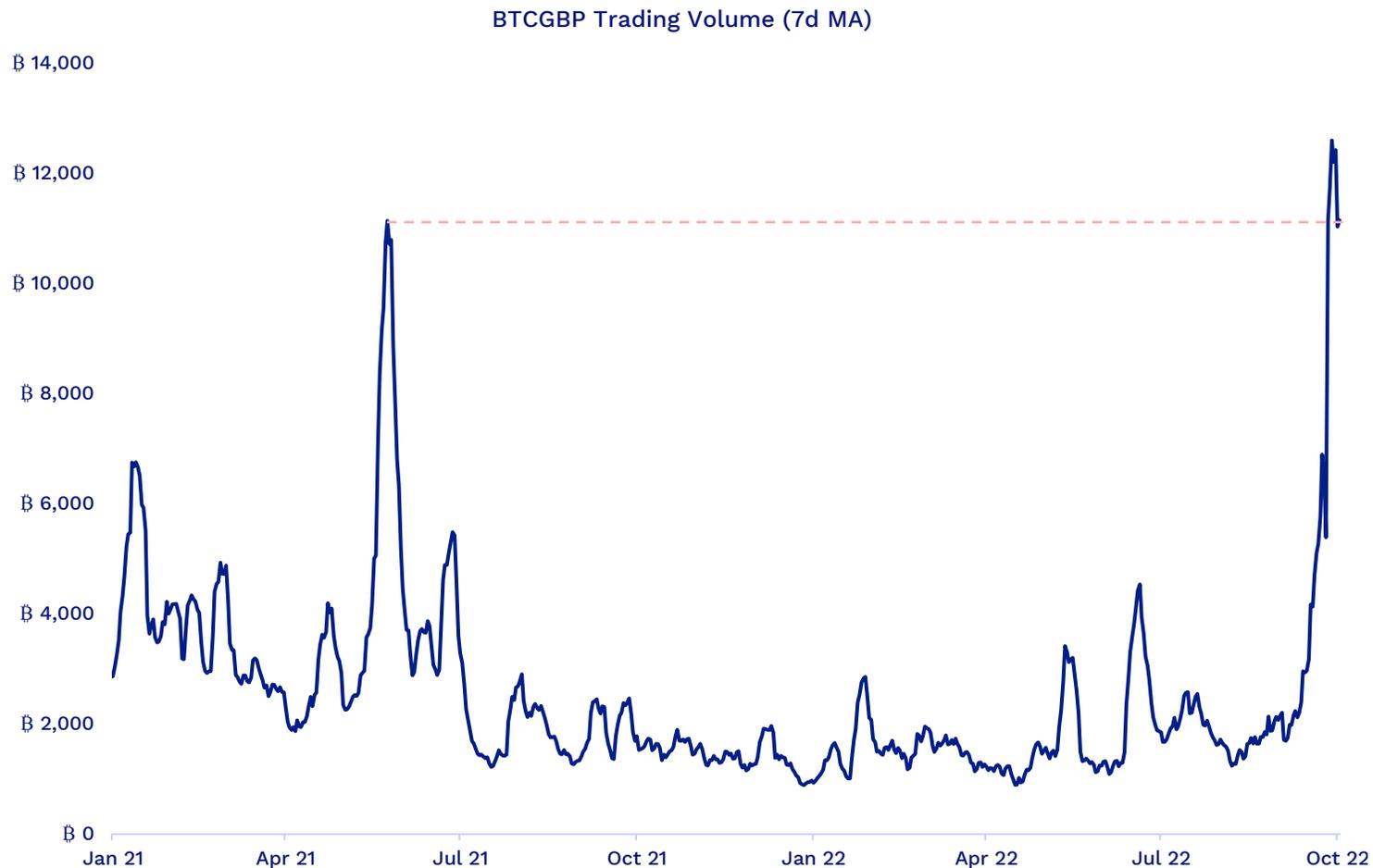
Source: Tradingview (Coinbase)



Bitcoin trading volumes in GBP pushing to new ATH

British bitcoin trading volumes soared to new all-time highs last week as the GBP pushed to new all-time lows vs. the US Dollar.

- Last week, the British Pound plunged to a new all-time low versus the US Dollar amidst a feisty week in the UK pending proposed and later abandoned tax cuts. Amid the GBP plunge, BTCGBP volumes soared.
- BTCGBP pairs saw trading volumes climbing above 47,000 BTC last Monday, after having experienced growth throughout the latter parts of September.
- Most of the growth was concentrated in spiking volumes on Bitfinex.
- The 7-day average BTCGBP trading volume reached a new all-time high, surpassing the May 2021 peak last week. Similar tendencies occurred in ETHGBP.
- Structurally, the situation resembles what we saw in the Russian ruble and Ukrainian hryvnia earlier this year.
- The most likely explanation behind the soaring GBP volumes is market maker rebalancing, as we elaborate in the next slide, but flows may also be exaggerated by crypto gaining mind share amidst declining trust in the British Pound.



Source: Tradingview (Binance, Coinbase, Kraken, Bitfinex, Bitstamp, Gemini)

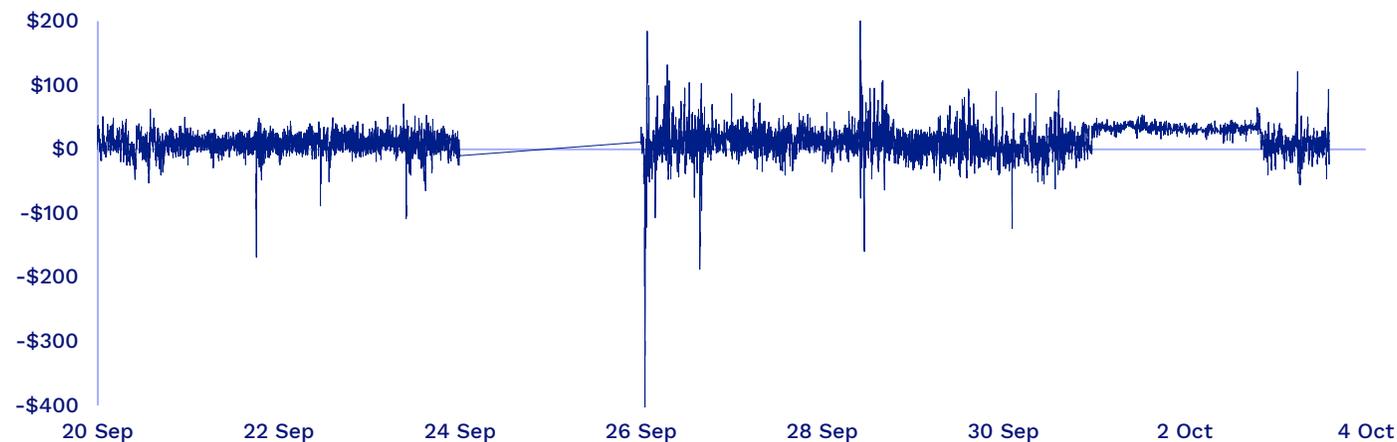


Market makers cautious amid the GBP plunge

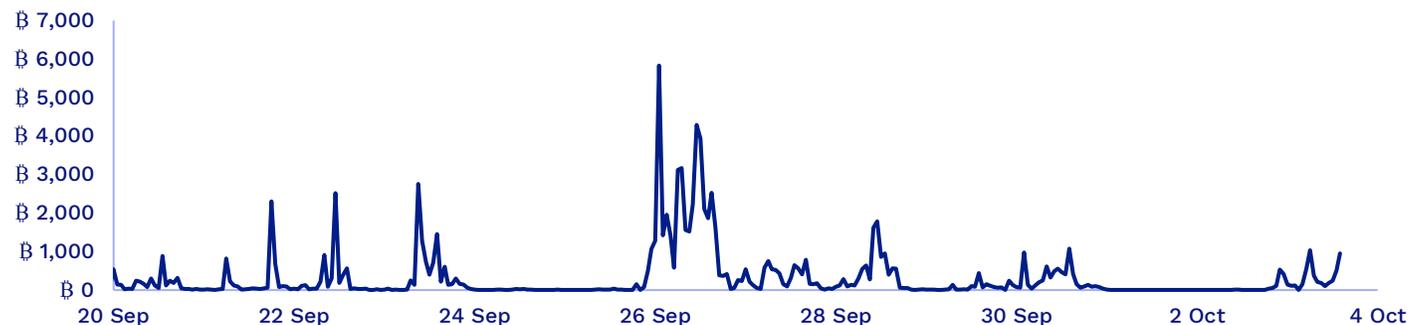
Examining Bitfinex's GBP volume and price discrepancies more thoroughly.

- The GBP volatility last week was highly unusual, creating opportunities and price discrepancies.
- Volumes soared coinciding with the GBPUSD bottom early Monday last week. Adjusting the BTCGBP pair to USD shows that the BTCGBP traded at a significant discount to dollar spot amid the height of the pound frenzy.
- The charts illustrate the dollar-adjusted premium or discount in Bitfinex's BTCGBP pair last week.
- As the GBP bottomed vs. the USD, BTCGBP traded at a massive discount compared to BTCUSD. The discount turned into a prolonged premium with certain wicks deep into discount terrains as GBP traded in a highly volatile environment.
- The prolonged structural mispricing may have been caused by market participants seeking to reduce GBP exposure in the uncertain environment.
- It's likely that the predominant force was market makers reducing their exposure. Substantial wicks towards the downside during the highly volatile days imply inefficiencies, lagging, and arbitrage opportunities that active market makers would have taken during regular market conditions.

BTCGBP premium/discount vs. BTCUSD



BTCGBP: Hourly trading volume (Bitfinex)



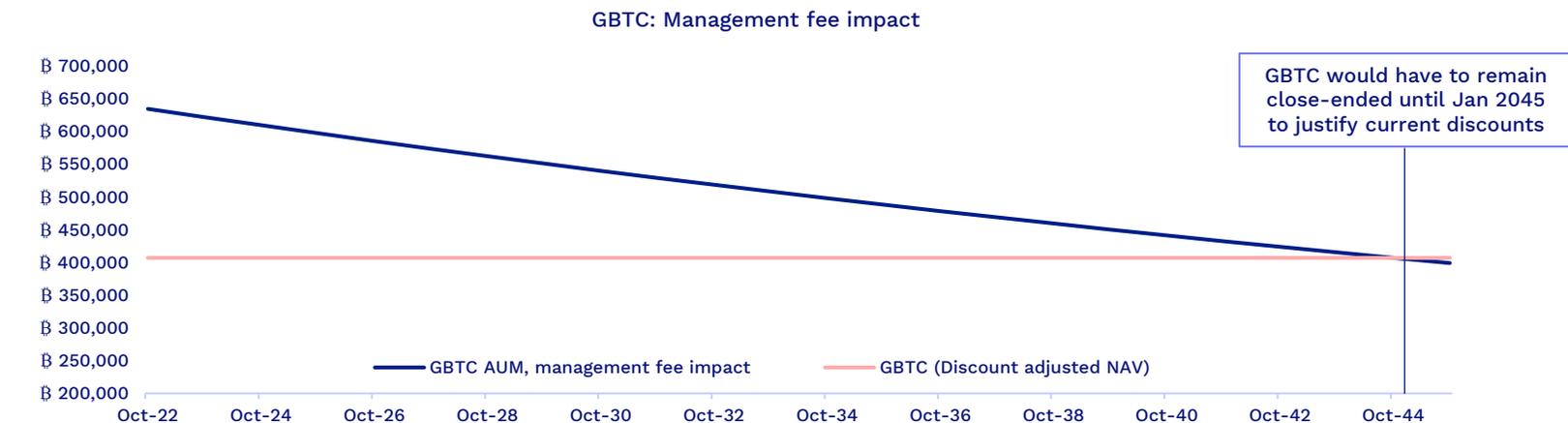
Source: Tradingview (Binance, Coinbase, Kraken, Bitfinex, Bitstamp, Gemini)



The opposite Grayscale arb no one is taking

The GBTC discount reached its highest mark ever last week at 36.2%.

- The GBTC discount to its NAV has grown further in the last week, reaching lows of 36.2%, or implied BTC prices of \$12,500.
- The discount appears as GBTC remains a close-ended fund following the SEC's denial of Grayscale's ETF filing this summer. Nonetheless, within the current discount, the market is pricing in Grayscale staying close-ended until January 2045.
- Grayscale has been vocal about its intentions to convert the fund into an ETF and has sued SEC following the denial. While the outcome of the lawsuit is highly uncertain, steps are being taken in the US to build a clear regulatory framework covering digital assets, and Gensler has signaled support for CFTC having BTC oversight.
- GBTC is structured with a 2% annual management fee based on the AUM of the fund. If the fund structure remains close-ended until 2045, Grayscale will garner 235,000 BTC in management fees.
- There are good arguments to be made to invest in GBTC at current discounts. The fact that discounts haven't narrowed suggests that Wall Street is either overlooking BTC opportunities or reluctant to commit to a long-term play on BTC. As sentiment improves, GBTC's discount may narrow. In turn, GBTC may absorb some of the BTC demand and thus reduce some potential upside in BTC.

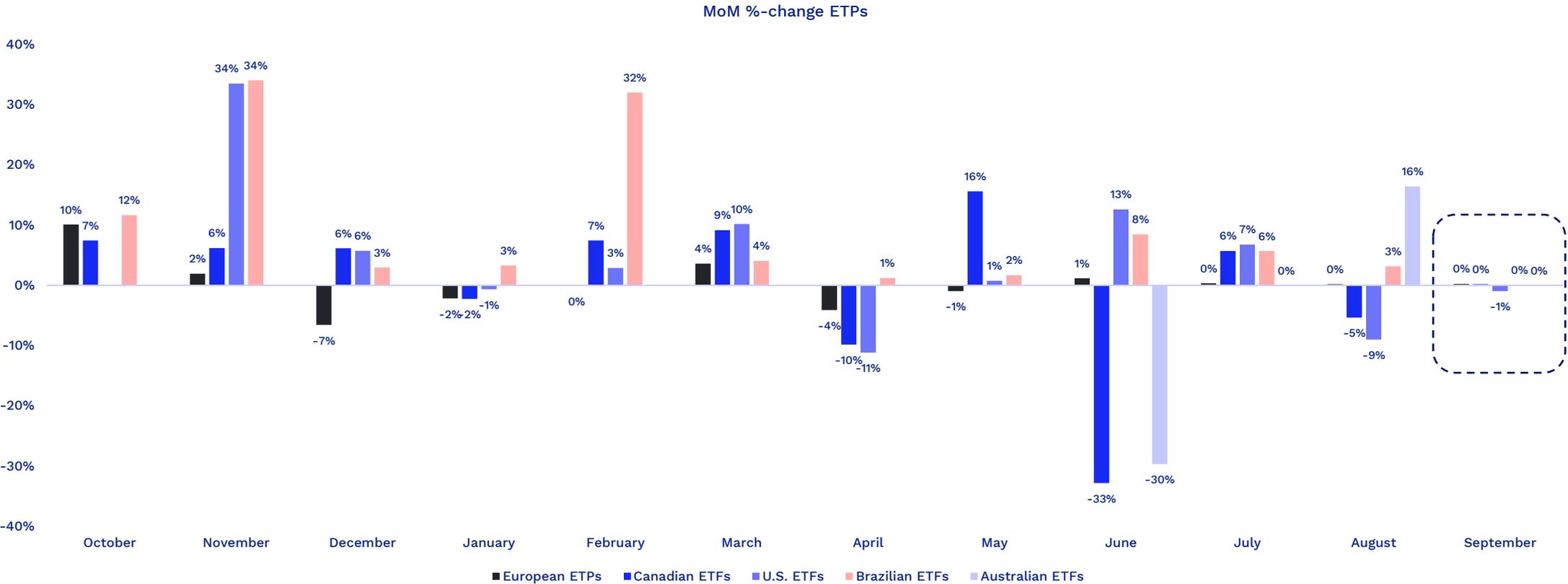


Source: Skew, Ycharts, Tradingview



No flow September: ETFs stagnating

September saw very muted activity in BTC ETPs, with no material flows as market activity stagnates. Under the hood, U.S. ETFs have been the most interesting to follow this month, as BITI's AUM has stabilized at new highs while BITO experiences lackluster flows. As illustrated in slide 18, U.S. BTC ETFs represent 50% of the open interest in the futures market and tend to account for 5-10% of the daily trading volume.



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

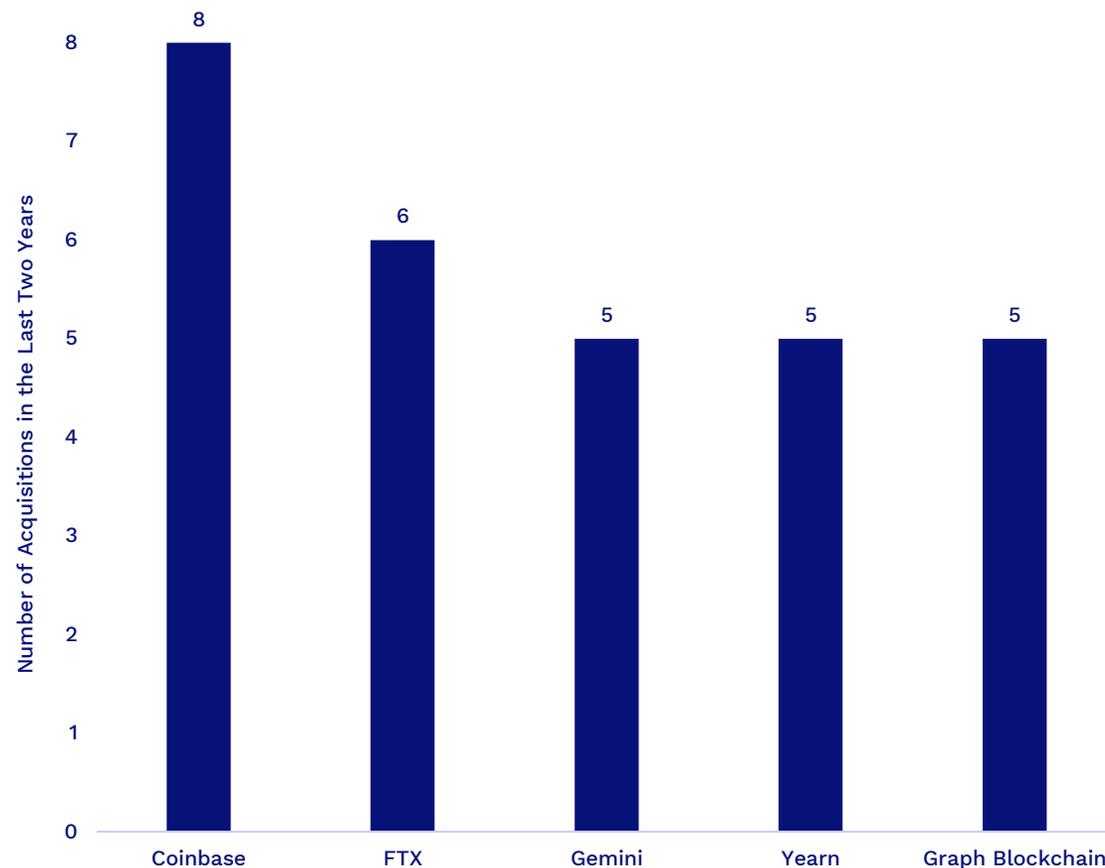


Crypto exchanges are on a buying spree

The fast-paced crypto industry has been the arena for an enormous amount of M&As in the last two years. Unsurprisingly, the crypto exchanges are the biggest acquirers.

- Over the last two years, 354 acquisitions have occurred in the crypto industry. During the bull market in 2021, tactical acquisitions were a popular method for crypto firms to expand. The nature of purchases has changed during this bear market as the strongest crypto companies use the opportunity to make distressed M&As and asset acquisitions.
- The exchanges have been the top acquirers in the crypto industry over the last two years. Coinbase has acquired eight companies, FTX six and Gemini five.
- There are several reasons for the crypto exchanges' high acquisition activity. Firstly, exchanges are the biggest and highest cash-yielding companies in the crypto industry, meaning they have enormous amounts of cash ready to deploy. Secondly, exchanges get incredible overviews of the crypto landscape and are in great positions to find acquisition targets.
- Still, the most important reason crypto exchanges are such active acquirers is that the exchange market is far from mature, and exchanges are rushing to expand as fast as possible. The fastest way to expand is through acquisitions. Coinbase is expanding into the fast-growing Turkish market by purchasing the country's leading crypto exchange BTC Turk. Meanwhile, FTX bought the leading Japanese exchange, Liquid.
- FTX has recently made headlines with the acquisition of bankrupt crypto lender Voyager and an option to buy crypto lender BlockFi. The distressed acquisitions have just started in the industry, as we see several prominent crypto companies, including FTX, raising money to continue their buying spree.

Top Acquirers in the Crypto Industry during the Last Two Years



Source: Architect Partners





Valuation



Bitcoin battling the \$20,000 resistance level - again

Not much has changed since last week's analysis, as bitcoin battles the \$20k area once again. Can it finally flip the resistance level to support?

- As we also saw last Tuesday, BTC has started the week with a push towards \$20,000. This level was regained and quickly lost last week, a common theme lately.
- BTC has struggled to stay above the \$20k level over the past month and is still in the lower range of its 3-month long consolidation range between \$17.5k and \$25k.
- The support area around \$19k held once again last week. BTC has now been trading in a tight range between ~\$18k-20k over the past three weeks.
- Traders should watch for a break up towards \$21,000. Furthermore, a climb above \$22,500 will signal short-term technical strength and could see the price continue towards the range-high of \$25,000.
- Towards the downside, not much has changed. BTC has strong support in the \$18k-\$19k area.
- As highlighted last week, BTC has mostly stayed directionless in its trading range since the June collapse, without any clear direction.
- However, traders should note that the price has mainly been testing the lower levels of the range, which is worth monitoring.



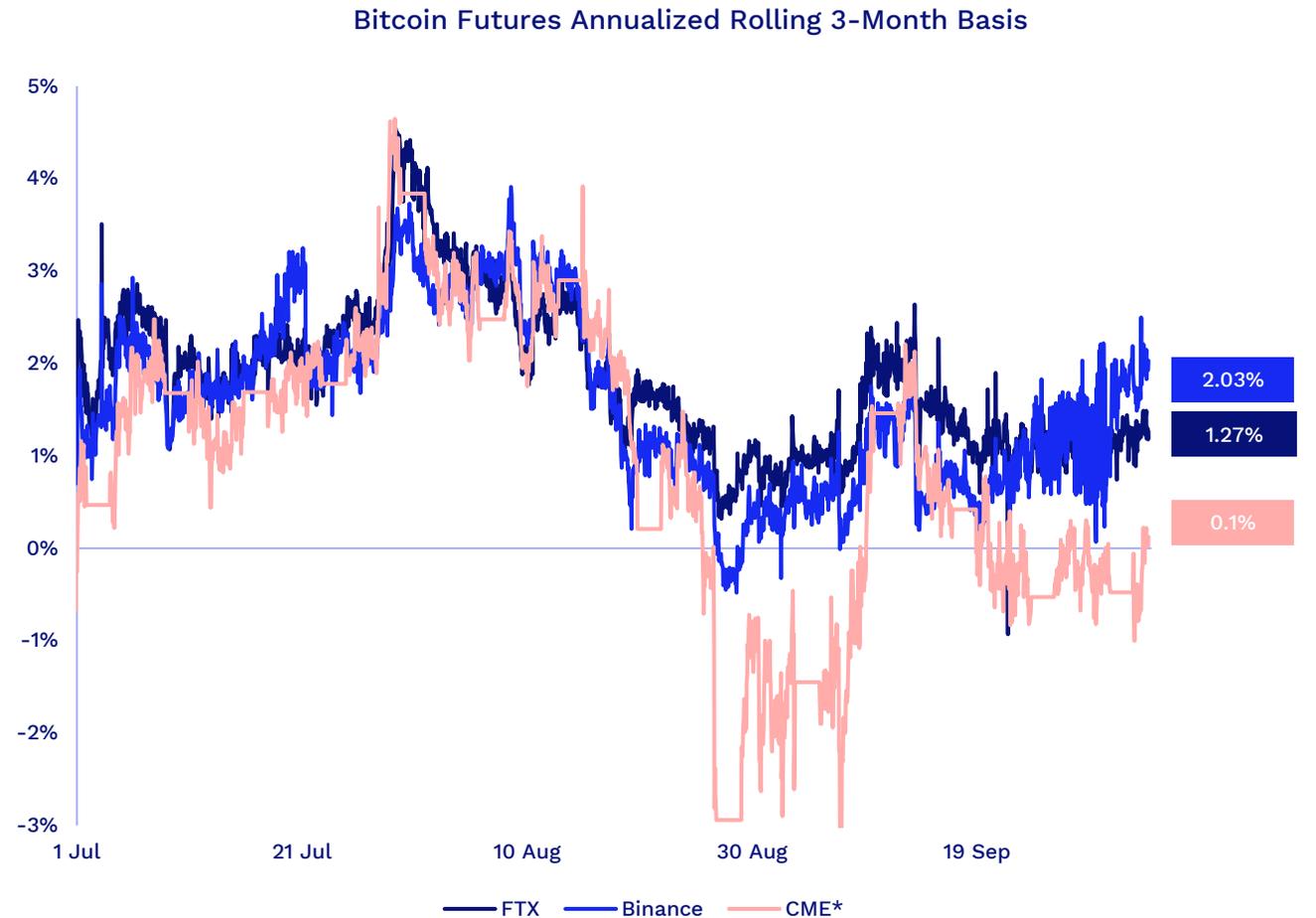
Source: Tradingview (Coinbase)



Still muted activity in futures

Futures premium see slight growth on Binance while CME still tends to trade below the spot market.

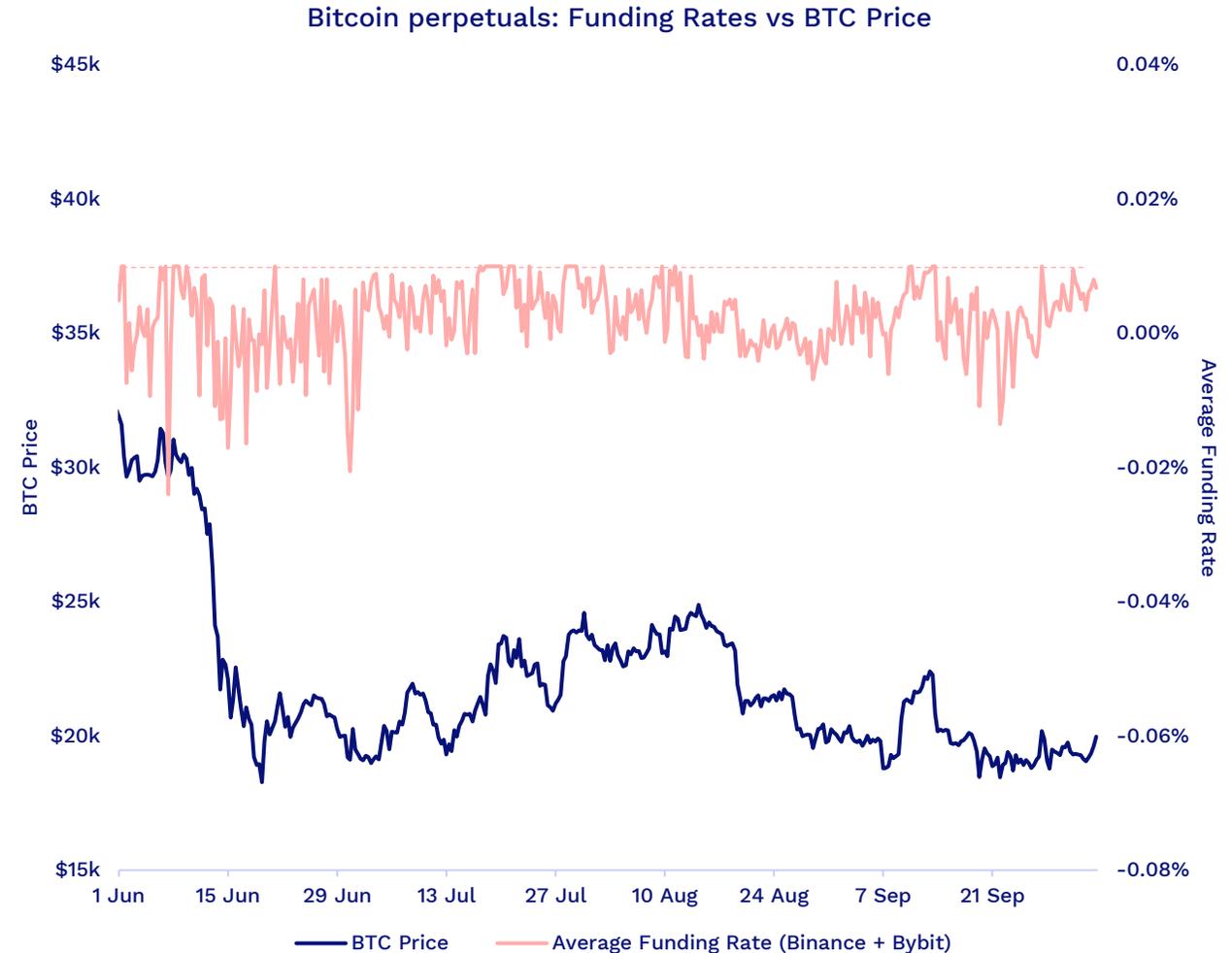
- CME's BTC futures have traded at a discount to spot throughout the second half of September, as active institutional traders stay cautious.
- Meanwhile, futures premiums have also stabilized on FTX, with futures trading on par with last week's levels.
- Binance has seen a more erratic pattern in the futures market, and the futures basis is trending up. Binance futures trades at a 2% premium for the first time since early September, suggesting that sentiment has seen a slight improvement lately.
- Nevertheless, premiums remain at extremely low levels, and there are few signals from the futures market in isolation.



Perps also in a slow environment

Funding rates remain neutral to below neutral for the tenth consecutive month.

- Funding rates stay neutral to below neutral in bitcoin perps.
- However, the last three funding rate intervals on Binance have seen funding rates at neutral levels, while open interest has grown further, as we elaborate in the next slide.
- This could indicate a growing willingness to add long exposure in BTC as BTC once again battles with the \$20k resistance.
- This growth originates from a prolonged environment of low volatility, with BTC oscillating in a very narrow trading range. The currently spiking open interest could generate a volatile environment as positions get unwound, and investors should prepare for possible squeezes.

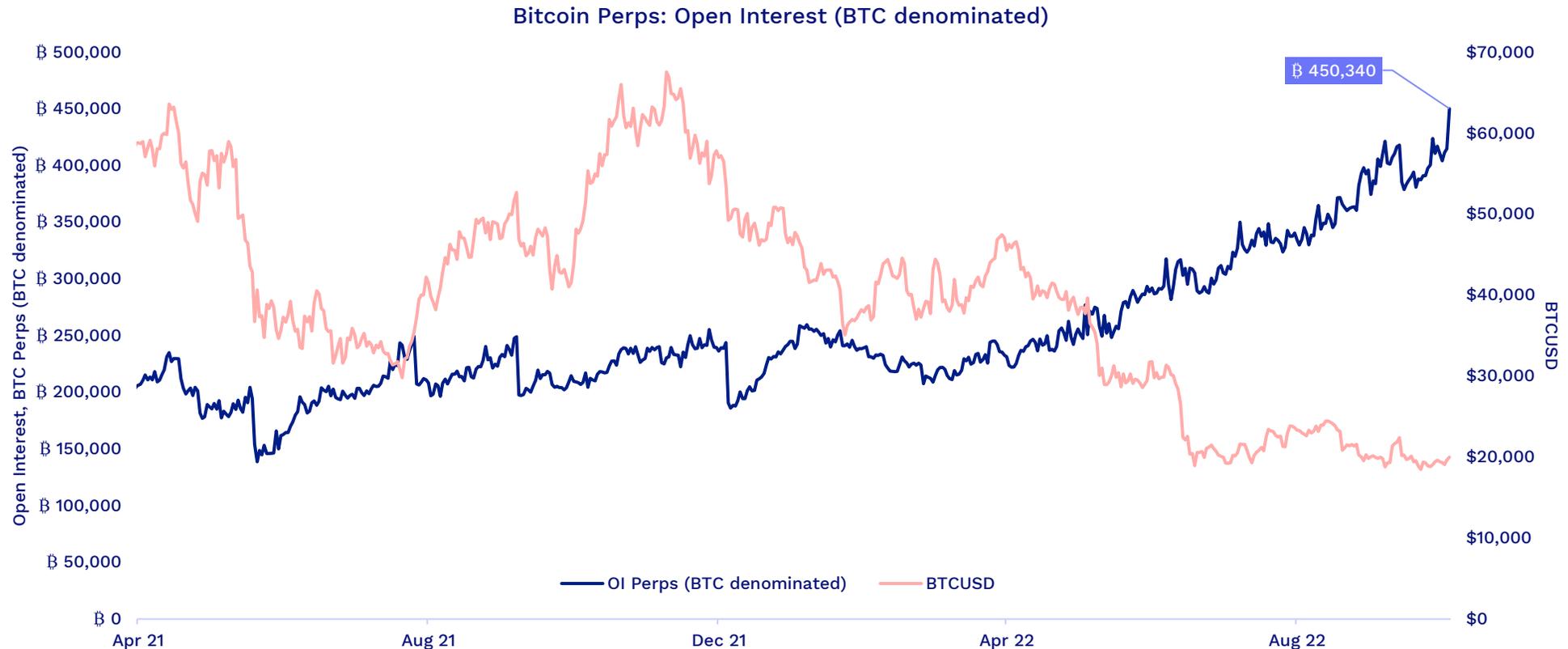


Source: Skew, Bybit, Binance



BTC denominated open interest at all-time high

A new concerning record has been reached in BTC perps as the open interest has spiked to another all-time high of 450,000 BTC. The BTC-denominated open interest has now been on a vertical venture since the Luna collapse in May. While the open interest in BTC perps is always evenly distributed between longs and shorts, the persistent uptrend suggests that shorts have been the leading force in this growth, reaping the benefits of a funding rate structure in favor of shorts. Nonetheless, the latest push topped with neutral funding rates on Binance suggests that short-term optimism by bulls has contributed to the recent spike. Be aware of any breakouts of BTC's trading range. This clogged-up open interest is likely to exaggerate any directional move as it gets unclogged.



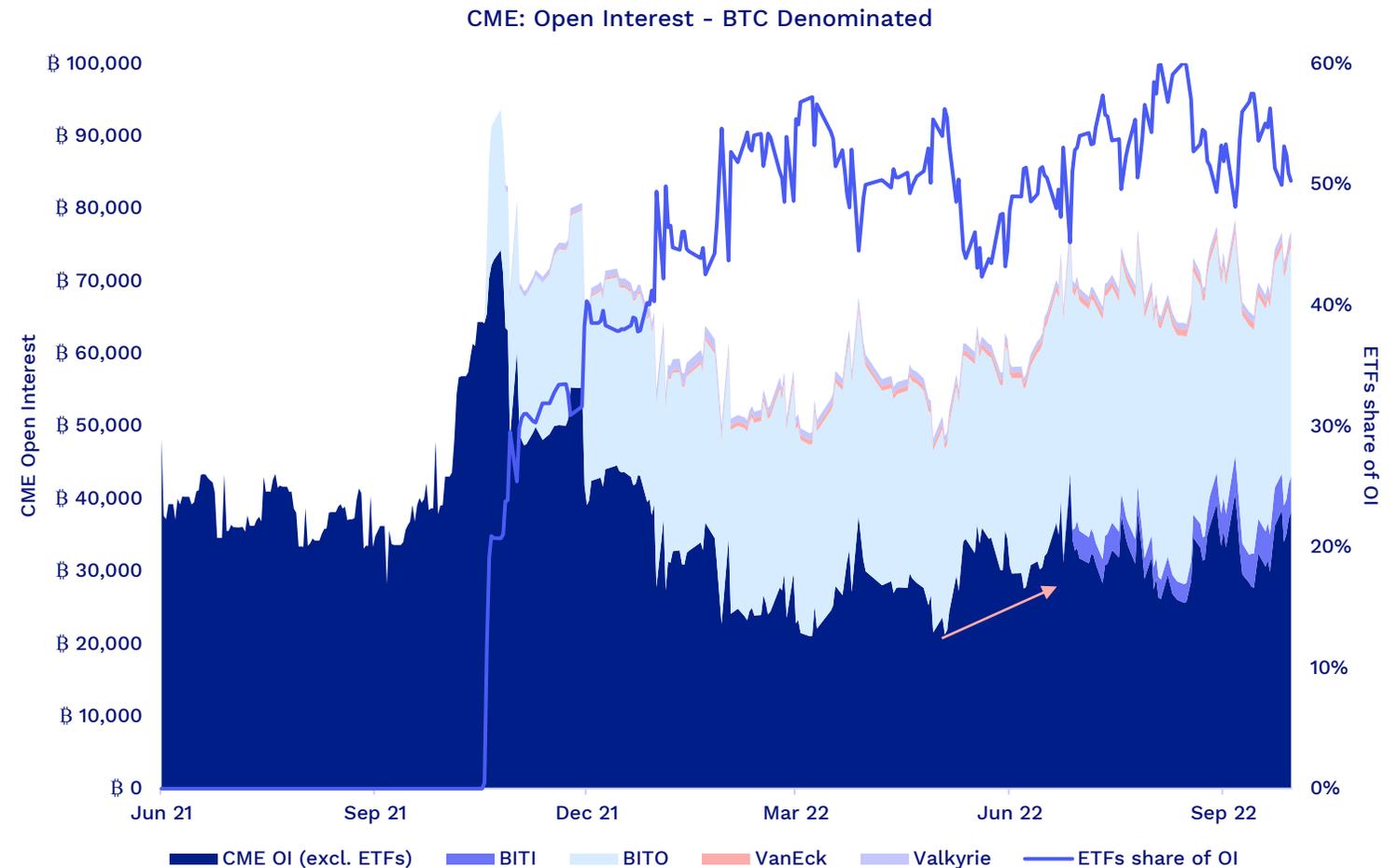
Source: Laevidas



50% of CME's open interest in BTC is held by ETFs

CME's notional open interest sits near all-time highs, but more than half of the surge is caused by ETFs.

- The bitcoin-denominated open interest currently sits above 70,000 BTC, near all-time highs.
- However, as illustrated in the chart – ETFs account for more than 50% of the open interest on CME.
- Additionally, ETF flows alone contribute to 5-10% of the trading volume in CME's bitcoin futures.
- When excluding the ETFs contribution to the open interest from the market, CME's open interest aligns with levels seen last summer.
- Interestingly, we note an increase in ETF excluded open interest from Q1 and Q2 2022 levels, suggesting that active institutional traders are more active in BTC futures, despite low futures premiums and reduced yield-based trading strategies.
- We've previously emphasized the importance of CME's BTC futures in BTC's price discovery. ETF flows have likely become an important further contributor through their role in CME's BTC futures, and thus BTC's directional pattern, which is why we frequently highlight BITO and BITI flows in our reports.





Blockchain Activity



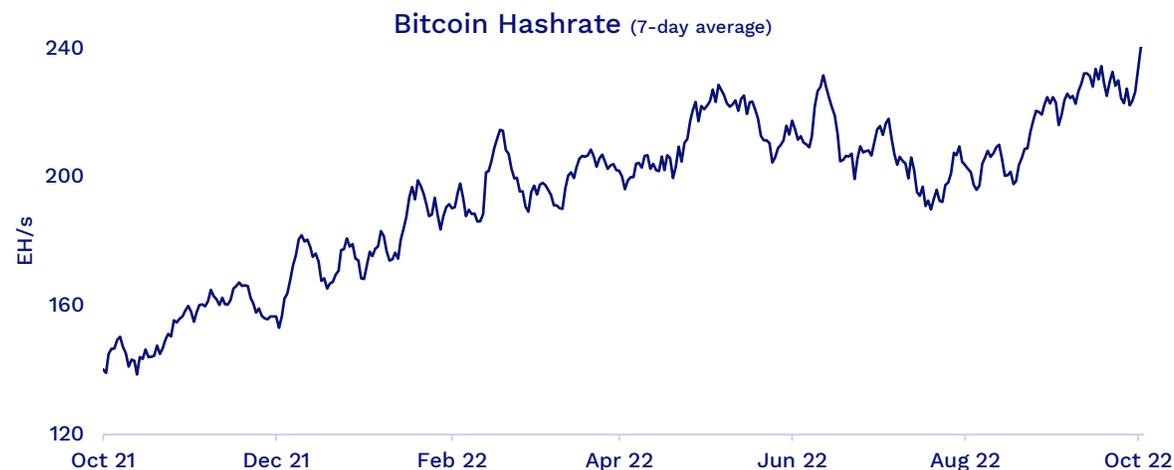
Bitcoin's hashrate surges to a new all-time high

Bitcoin miners keep getting squeezed from several angles as the hashrate reaches an all-time high simultaneously as the bitcoin price stays depressed and energy prices soar.

- Bitcoin mining is a cyclical industry. During the good times, miners heavily invest in new mining infrastructure that takes several months to get operational. This phenomenon leads the hashrate to lag the bitcoin price. The hashrate miners decided to get online when times were better in late 2021, and early 2022 started to come online around July. Since then, hashrate has surged to an all-time high while the bitcoin price has fallen like a rock.
- The ten biggest public miners combined added 8.1 EH/s of capacity in August alone, and they will keep growing their hashrate considerably as they await massive machine deliveries later this year. Still, it's unlikely that the hashrate will surpass 260 EH/s in 2022.
- The hashrate surge has led the block production rate to reach 6.45 blocks per hour, among the highest we have seen this year and far above the target of 6. As a result, the Bitcoin network will likely undergo a vast increase in mining difficulty in about one week.
- Mining economics are already under heavy pressure due to a depressed bitcoin price and growing energy prices. Soaring difficulty at the same time could be a setup for a perfect storm in the vulnerable bitcoin mining industry. We will elaborate more on that in the [next slide](#).
- While the hashrate is in the spotlight this week, several other things are happening on-chain. We mainly see a 12% growth in the daily transaction volume, primarily driven by an 8% increase in the average transaction size. Such on-chain transaction increases are usual during periods of surging bitcoin spot volume, as holders increasingly send bitcoin back and forth between exchanges.

		Bitcoin Network Data			
		10/3/2022	7d prior	7d Change	30d Trend
Network	Daily Miner Revenues	\$ 18,987,358	\$ 17,208,430	10.34%	
	Fees per day	\$ 263,137	\$ 254,431	3.42%	
	Fees % Revenues	1.39%	1.48%	-0.09%	
	Daily TX Volume (\$M)	\$ 3,445	\$ 3,086	11.63%	
	Transactions per day	259,805	251,039	3.49%	
Utility	Avg TX value \$	\$ 13,261	\$ 12,294	7.86%	
	# Blocks per hour	6.45	5.95	8.41%	
	Avg. # TX per block	1,679	1,623	3.49%	

Source: Bytetrete



Source: Blockchain.com



Bitcoin miners' revenues have plummeted by 81% since the peak

Bitcoin mining firms have seen massive reductions in their revenues. At the same time, their costs are fixed, leading to enormous margin compression.

- Hashprice is a miner's daily revenue per TH/s of hashrate. The hashprice is determined by the mining difficulty and the bitcoin price. The current depressed bitcoin price combined with the ever-increasing hashrate has led the hashprice to fall to \$0.077 per TH/s, its lowest level since mid-2020.
- One of the most important aspects of mining economics is that a miner has relatively fixed operating costs but highly fluctuating revenues. The cost of running a mining machine depends on the energy price, which historically has been stable, although most miners have seen significant increases in their energy prices this year.
- At the peak in October 2021, the hashprice reached \$0.422 per TH/s, meaning that the hashprice has fallen by 81% since then. For companies with fixed costs, an 81% decline in revenue naturally has a massive impact on margins, and most public miners have seen their gross margins plummet from 80-90% to 30-40%.
- The depleted hashprice's impact on miner revenues becomes clear when looking at the scale of major mining firms. 1 EH/s of mining machines raked in \$422k per day in October 2021, but only \$77k now. Most public miners have several EH/s of capacity, with the biggest, Core Scientific, operating a self-mining fleet of 12.7 EH/s.
- Mining economics are likely to keep worsening as the bitcoin price stays depressed at the same time as the global hashrate surges. Most public miners are now praying that the bitcoin price doesn't fall further. If it were to fall below \$15k, we would likely see some of the [highest-debt public miners](#) capitulate, as their revenues would not be sufficient to service this debt.

Bitcoin Mining: Hashprice (Daily Revenue per TH/s)



Source: Hashrate Index



Lightning Network Public Capacity surpasses 5,000 BTC

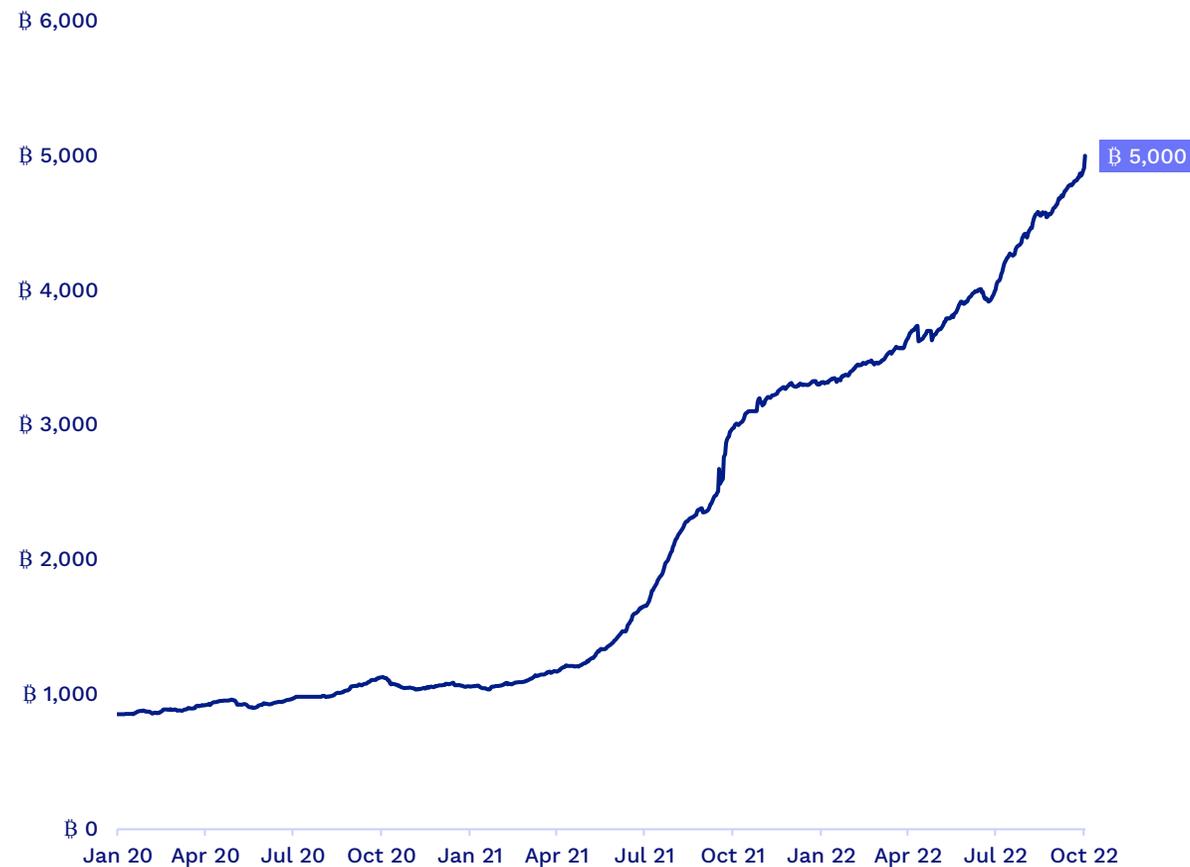
The Lightning Network's public capacity passed another milestone this week.

- The combined capacity in public channels is now over 5,000 bitcoin for the first time.
- The final push above 5,000 was largely driven by River Financial and Loop by Lightning Labs expanding their channel capacity.

Stablecoins are one step closer to Bitcoin and the Lightning Network.

- Earlier this year, Lightning Labs raised \$70 million and announced its new project, The Taro Protocol.
- Taro will allow tokens to be issued on the Bitcoin Network, paving the way for stablecoin transactions with Bitcoin security.
- These Bitcoin-issued tokens can be used to open channels on the Lightning Network in similar fashion as with bitcoin.
- Only the starting and ending channel will need stablecoin liquidity with the Taro Protocol on the Lightning Network, meaning stablecoin transactions on Lightning can utilize the bitcoin liquidity of the Lightning Network for routing.
- Lightning Labs published the initial code for its Taro protocol last week, encouraging the community to explore and battle-test the new protocol.
- And importantly, Lightning service providers can start readying their applications for handling stablecoins issued through Taro in the future.

Lightning Network Public Capacity



Source: BitcoinVisuals



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