The Weekly Update

Week 41, 2022

Provided by arcane research

1

Market Update

- The crypto market remains heavily rangebound in a low volatility environment as BTC and ETH see slight gains of 2% and 3%, respectively, after a tranquil week in the market.
- The daily bitcoin volatility has continued lower over the past week, now touching levels not seen in two years. The 30-day volatility is now at 1.9%, the lowest since late October 2020.
- Correlations remain high across assets, and the dollar seems to be the source leading it all, as BTC's DXY correlation has reached levels not seen since the covid crash in March 2020. Are we nearing the peak of cross-asset correlations?

2

Valuation

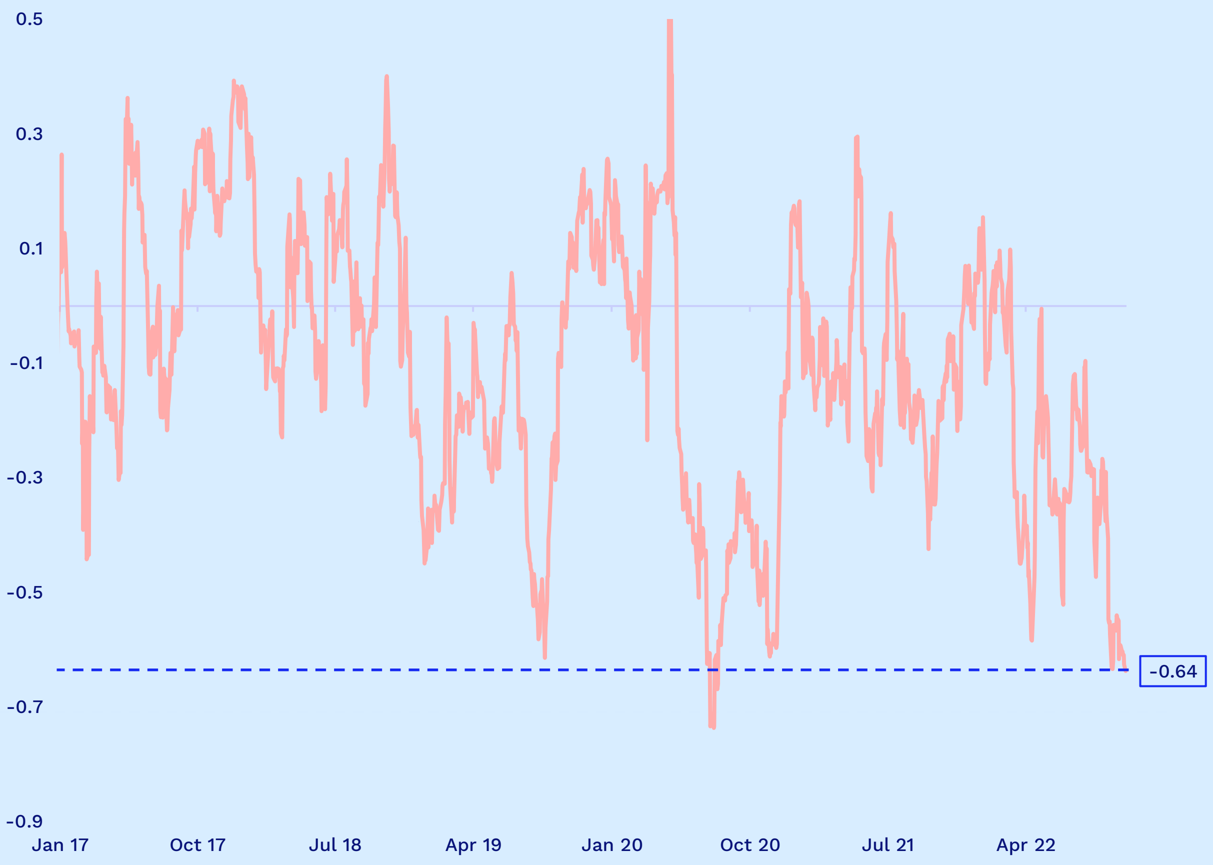
- The trading range for bitcoin is tightening even more this week, with bitcoin mostly trading between $19k and $20k. Bitcoin briefly touched levels below $18.5k for the first time in three weeks but quickly recovered.
- CME's BTC futures is trading in backwardation for the first time since May 2019.
- Leverage remains exceptionally high in BTC perps as open interest has stabilized above 500,000 BTC. This highly unusual ever-growing leverage trend remains a potent volatility catalyst for the crypto market.

3

Blockchain Activity

- The difficulty adjustment last week did not stop the surging hashrate, as we've seen new highs lately. However, the block production rate is now closer to normal, seeing daily fees recover.
- While on-chain indicators fail to cover flows related to the financialization of BTC, we examine how most on-chain market indicators signal that the bottom is already in to illustrate the gravity of the current bear market from a pure BTC-centric point of view.

Bitcoin: 30-day correlation to DXY



Source: Tradingview

CPI rollercoaster followed by low volatility

- The crypto market remains heavily rangebound in a low volatility environment as BTC and ETH see slight gains of 2% and 3%, respectively, after a tranquil week in the market.
- The last week has been flat, except for Thursday's CPI release. The CPI release introduced volatility to the market, as CPI once again came in hotter than expected. This caused interest rate hike expectations to increase as the market fully priced in a 75bps hike by the FED in the coming FOMC, causing knock-on effects on asset prices, leading most assets to move in a highly correlated manner (slide 8).
- Thursday's CPI price reaction carries similarities to the July 13th CPI release, where the market saw a strong downside reaction before a swift recovery in risk assets.
- Apecoin is this week's worst performer, trading down 13% on news that Yuga Labs is facing a probe by the SEC into whether sales of some of its offerings violate federal law.

Last week of top 50 by market capitalization

Best Performing	Price	Last week	Last month	YTD
Quant	192.53	26.4%	1.7%	10%
Hedera	0.06	7.7%	7.0%	-79%
OKB	16.85	7.1%	-3.3%	-42%

Worst Performing	Price	Last week	Last month	YTD
ApeCoin	4.48000	-13.0%	-20.4%	-47%
Stellar	0.11	-9.2%	-1.1%	-59%
Cardano	0.37	-8.6%	-24.6%	-73%

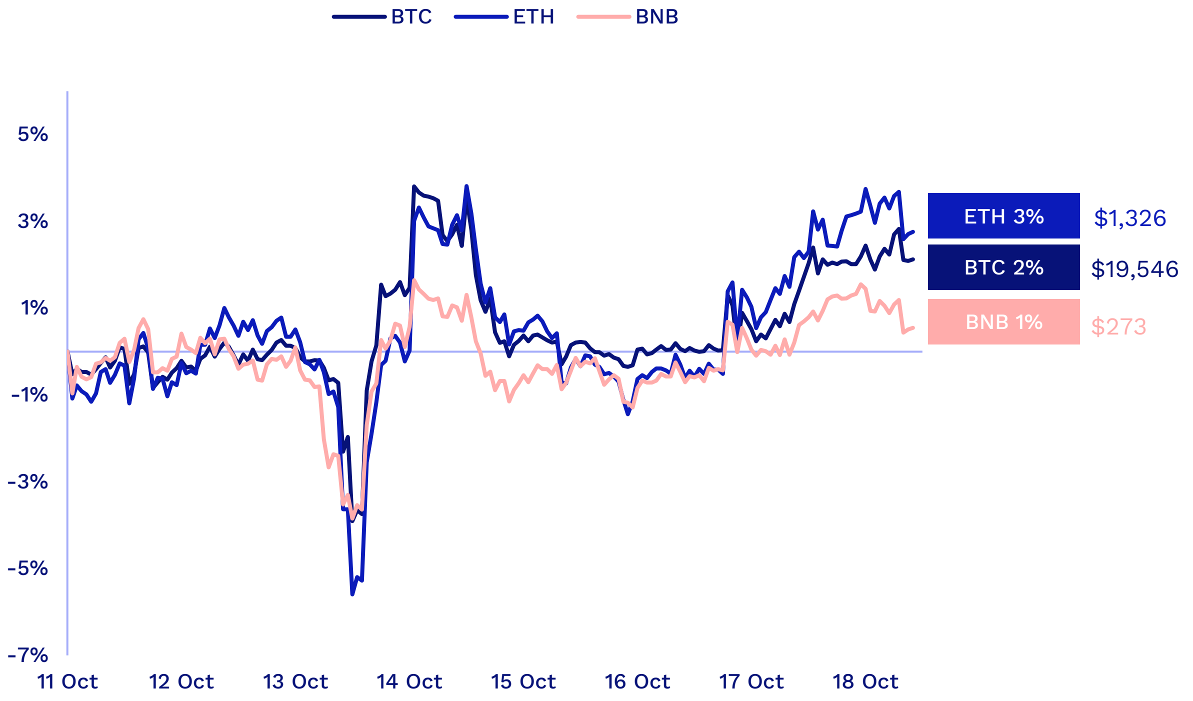
Source: CoinGecko, messari.io

Bitcoin Correlation:

90-day correlation (weekly change included)	ETH		GOLD		S&P500	
BTC	0.836	0.014	0.450	0.029	0.616	0.002

Source: CoinMetrics

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



Source: Tradingview (Coinbase, Binance US)

Bitcoin leading the way in a flat October

Still no clear trend in October, as the crypto market stays flat. Bitcoin and ether are gaining market shares relative to the other large caps this week, while small caps are struggling.

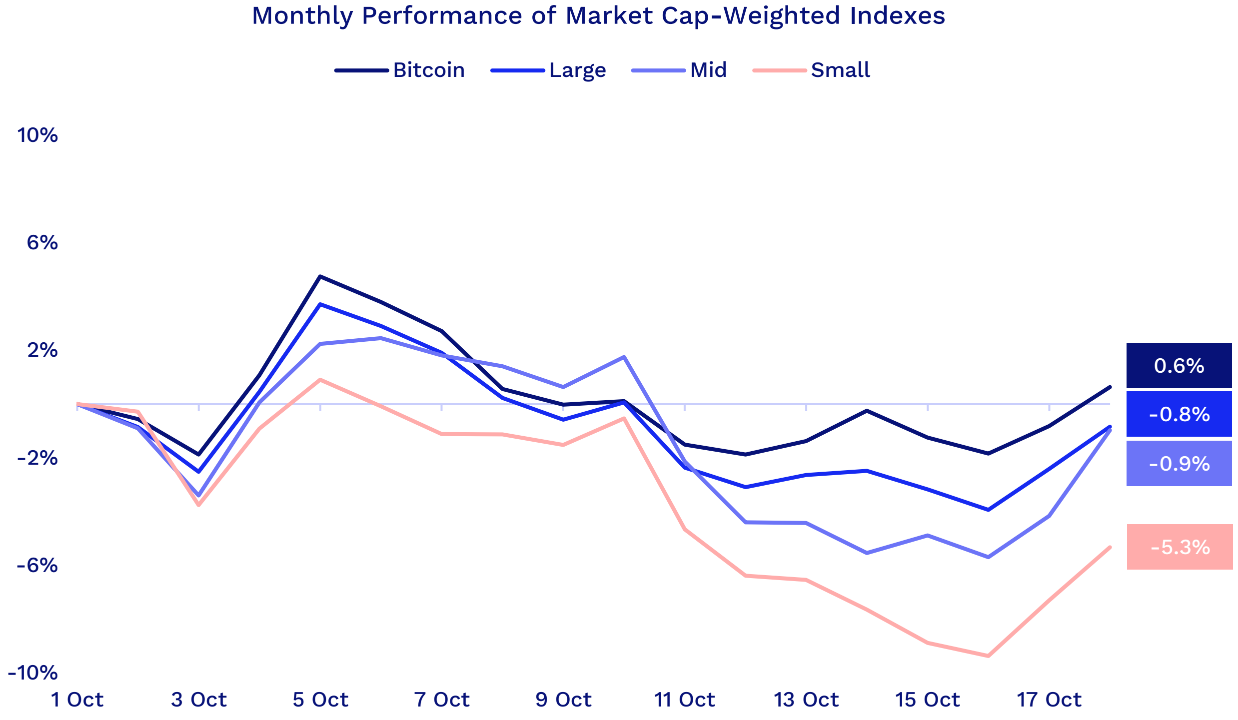
- All indexes are still marginally in the red so far in October, but the overall flat performance persists this week as well.
- Bitcoin is marginally on the plus side in October, up 0.6%. BTC and ETH have shown strength relative to the top 10 by market cap over the past week, stealing market shares from the rest.
- The Large Cap Index and the Mid Cap Index are down approx. 1% so far this month after a slight recovery over the past few days.
- The Small Caps Index is struggling the most and is still down 5% in October after touching levels closer to -10% this weekend before recovering.
- The crypto market is still highly aligned with the stock market this month. Both bitcoin and Nasdaq are up ~1% in October, with the correlation staying at record highs.

Percentage of Total Market Capitalization

	BTC	ETH	USDT	USDC	BNB	XRP	BUSD	ADA	SOL	DOGE
Market Share	40.14%	17.42%	7.29%	4.75%	4.72%	2.53%	2.30%	1.36%	1.19%	0.85%
Weekly Change	0.37%	0.36%	-0.16%	-0.26%	-0.02%	-0.14%	-0.06%	-0.12%	-0.03%	0.00%

* Weekly change in percentage points

Source: CoinMarketCap

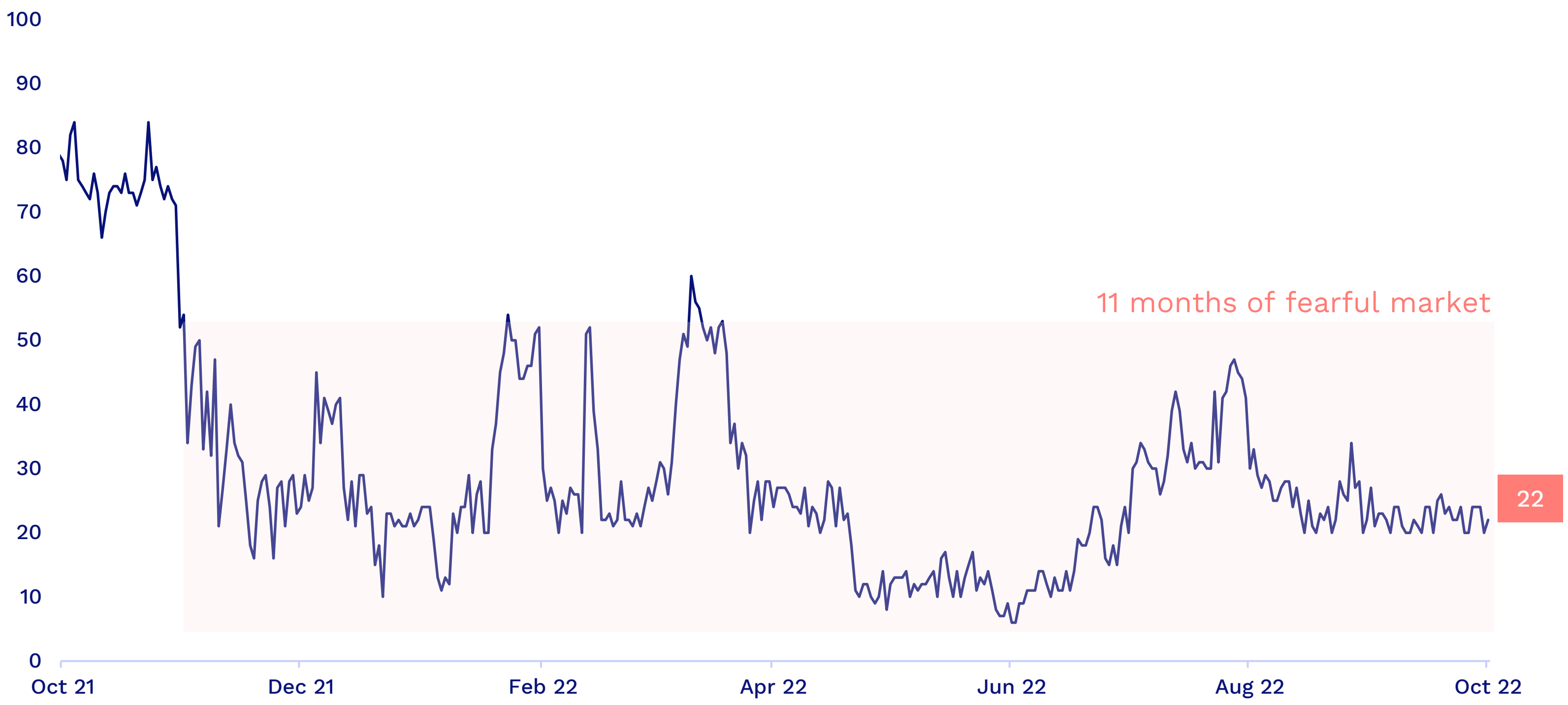


Source: Bletchley Indexes, Tradingview (Coinbase)

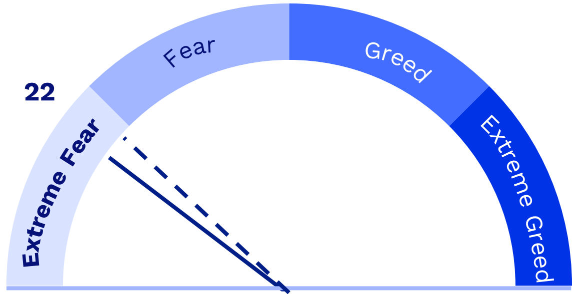
Approaching one full year of fear in the market

The Fear and Greed Index is relatively unchanged this week, down to 22 from 24 last week. We're approaching a full year of bearish sentiment and a fearful market. The sentiment crashed down in the "Fear" area in mid-November last year and has mostly stayed dreadful ever since. Except for a few spikes out of the "Fear" area and above 50, the index has been hovering between fear and extreme fear for more than 11 months.

Fear and Greed Index



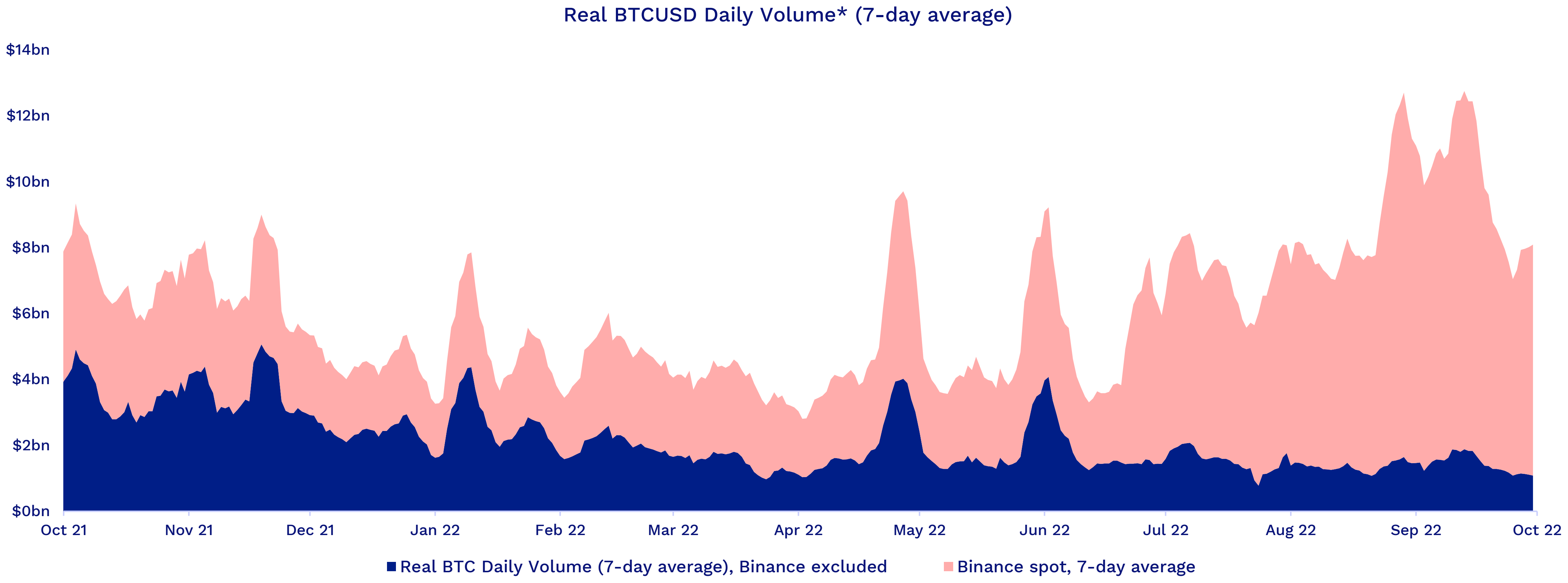
Source: Alternative.me



Now	Last week	Last month
Extreme Fear (22)	Extreme Fear (24)	Fear (27)

Highest daily volume in October last week, but still trending downwards

The bitcoin spot volume has continued to decline this week, an expected observation with the current low volatility (next slide). However, the spot volume on Binance isolated has actually recovered slightly since last week, while other spot exchanges have seen a decline of another 10% on average over the past week. We saw a significant increase in activity just before the weekend, with a lot of intraday action on Thursday with the U.S. CPI release. Still, the trading activity quickly diminished over the weekend. Thursday saw the highest daily volume so far in October, but the trend is still downwards on most spot exchanges

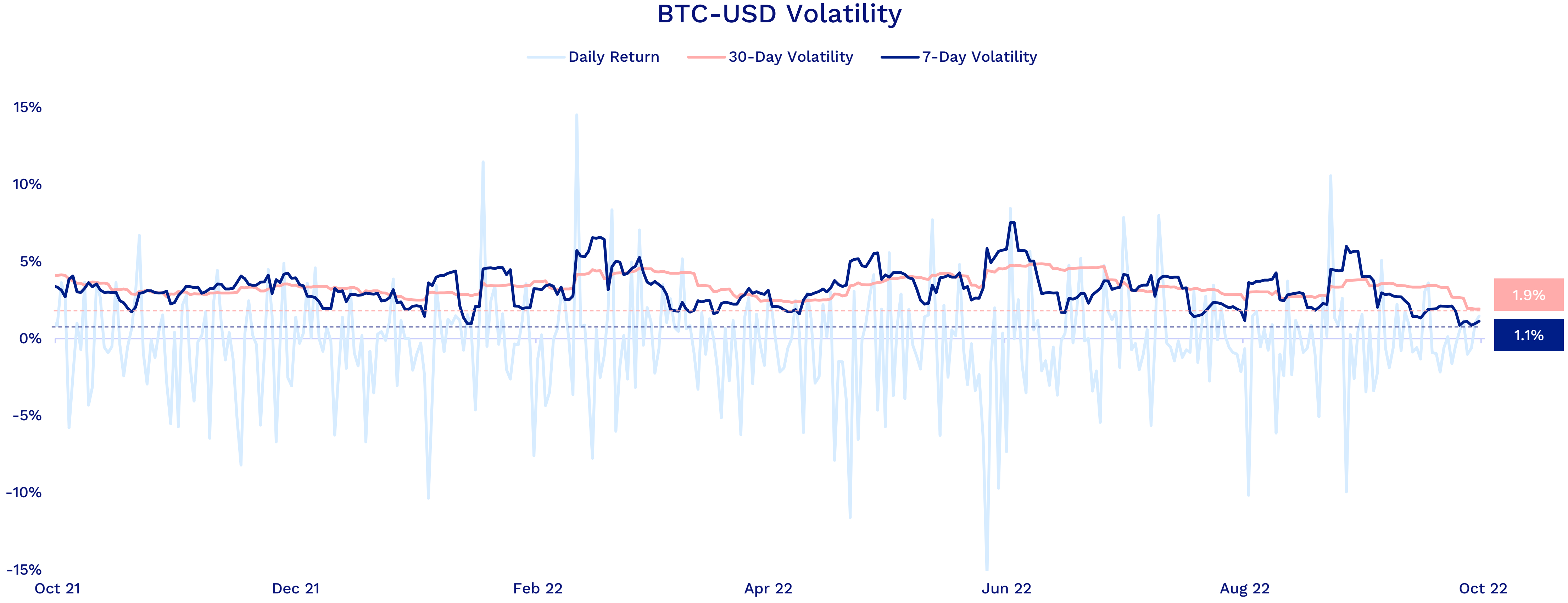


Source: Tradingview

*Includes Bitwise 10 exchanges and FTX

2-year low daily volatility

The daily bitcoin volatility has continued lower over the past week, now touching levels not seen in two years. The 30-day volatility is now at 1.9%, the lowest since late October 2020. The 7-day volatility has fallen even lower, touching levels below 1% this weekend, bottoming at levels not seen since July 2020. While the daily volatility tells a story of an idle bitcoin price, the story is different if we look at intraday activity. Bitcoin saw price fluctuations of almost 9% within 12 hours after Thursday's U.S. CPI release. The daily volatility only measures closing prices each day and doesn't capture intraday activity. Nevertheless, the bitcoin price has closed within a $500 range for the last ten days, and we still believe that volatility will arrive sooner rather than later.



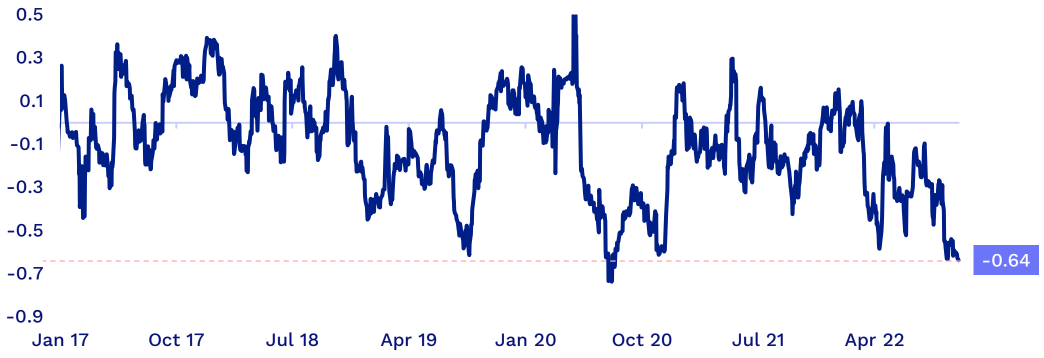
Source: Tradingview (Coinbase)

One global dollar trade: Correlations stay at extreme levels

Correlations remain high across assets, and the dollar seems to be the source leading it all, as BTC's DXY correlation has reached levels not seen since the covid crash in March 2020. Are we nearing the peak of cross-asset correlations?

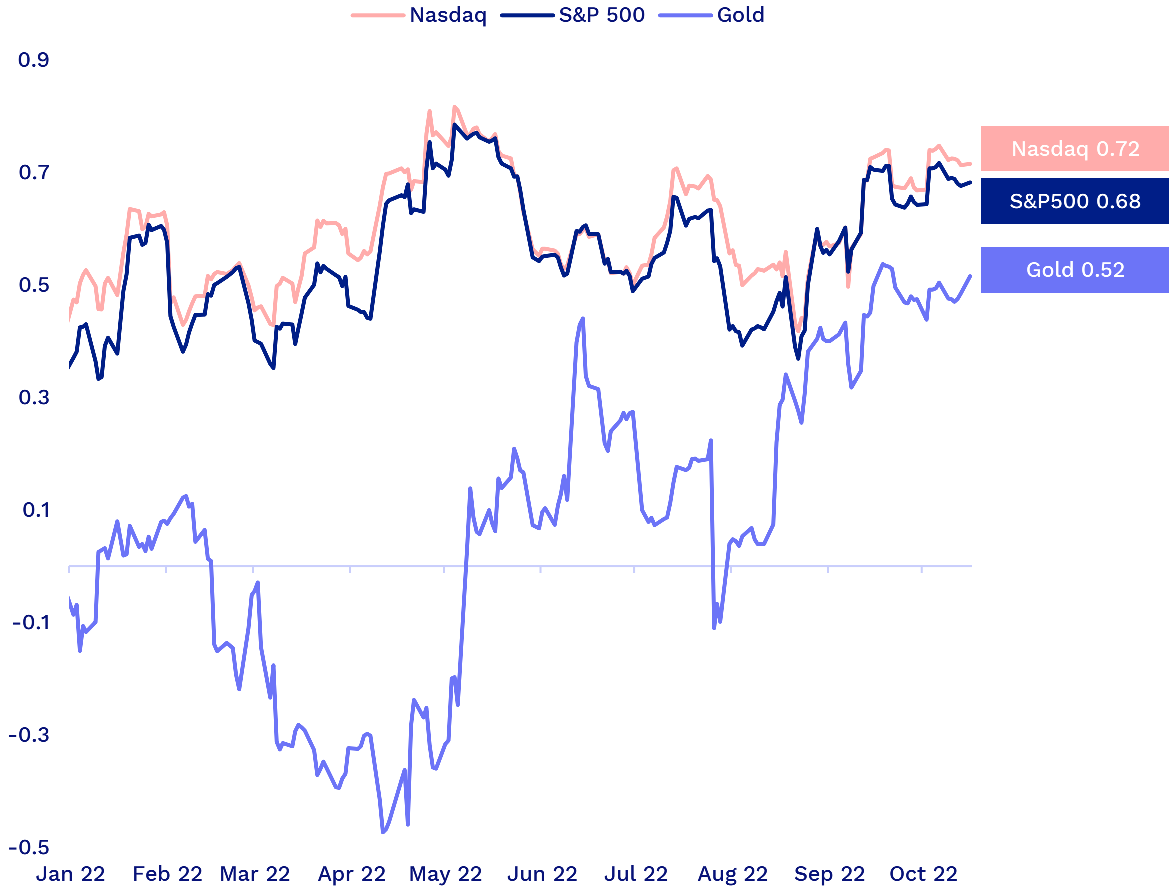
- Last week's CPI surprise caused yet another joint market movement across a various range of asset classes, as the market repriced the Nov 2nd FOMC hiking expectations.
- The 30-day correlation between BTC and U.S. equities has stabilized at around 0.7 in the last five weeks. Back in April and May, correlations trailed at similar highs for 6 consecutive weeks until the tight correlation softened slightly amid the crypto contagion period.
- BTC's correlation to gold sits at multi-year highs, suggesting that the flight toward the dollar is widening its reach.
- All in all, correlations are pushed towards unusual extremes in both directions as BTC's 30-day correlation to DXY has declined to -0.64. BTC's 30-day correlation to the DXY has only been lower on 9 occasions since 2017. All occurrences happened in the summer of 2020, following the covid crash.
- In essence, the dollar flow seems to be the one source leading the global markets, and BTC is heavily impacted, with correlations reigning unusually extreme. Is this the correlation 1 moment?

Bitcoin: 30-day correlation to DXY



Source: Tradingview

Bitcoin: 30-day correlation to various indices



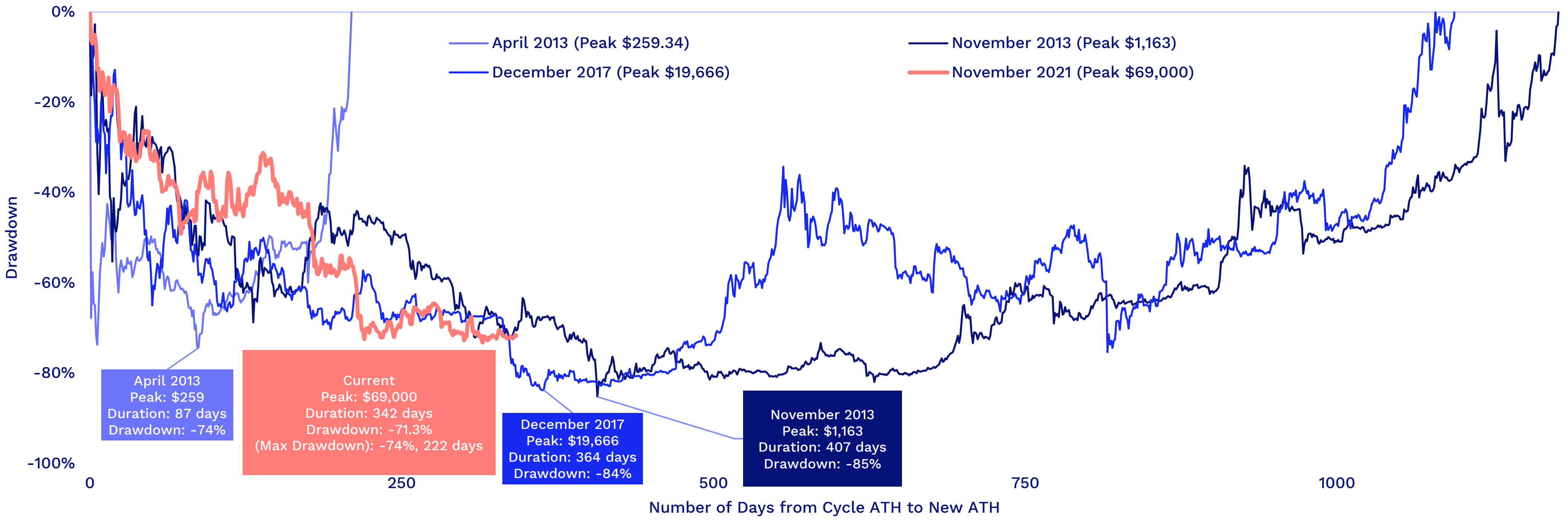
Source: Tradingview

Revisiting bitcoin’s historical drawdowns

It’s been 342 days since BTC reached its all-time high, with BTC having seen a drawdown of 70% from its peak, with a max drawdown of 74% amid the contagion collapse. While history is unlikely to repeat, the two previous major bear markets in BTC might provide some insights regarding the longevity of the current bear market. During the 2018 bear market, BTC saw a max drawdown from peak to trough of 84%, lasting 364 days, while the 2014 cycle lasted longer, bottoming after 407 days. Both bottoms were followed by unusually low volatility.

Almost all on-chain indicators are at levels coinciding with levels only seen during the bottoms of the previous bear markets, and it’s far from given that BTC will experience new lows, despite a burdensome macro backdrop. Through both previous prolonged bear markets, we notice visibly flat markets for months after bottoming, analogous to how BTC has behaved since June. BTC has now traded in a tight range for 120 days since the June bottom. The 2018 low volatility bottoming range lasted for 130 days, while the 2014 low volatility range saw 280 days of very low volatility.

Bitcoin’s Historical Drawdowns

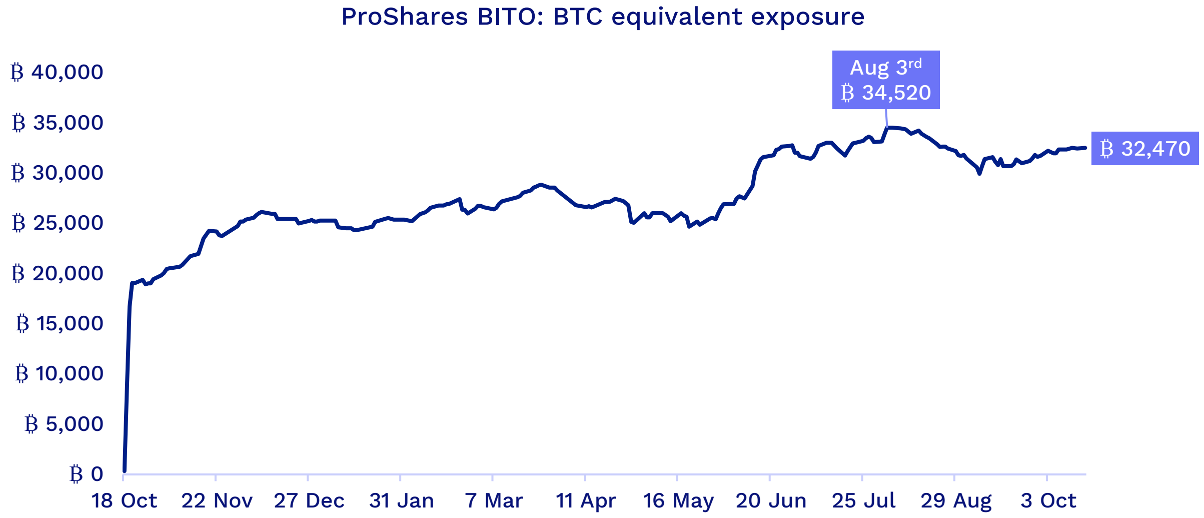


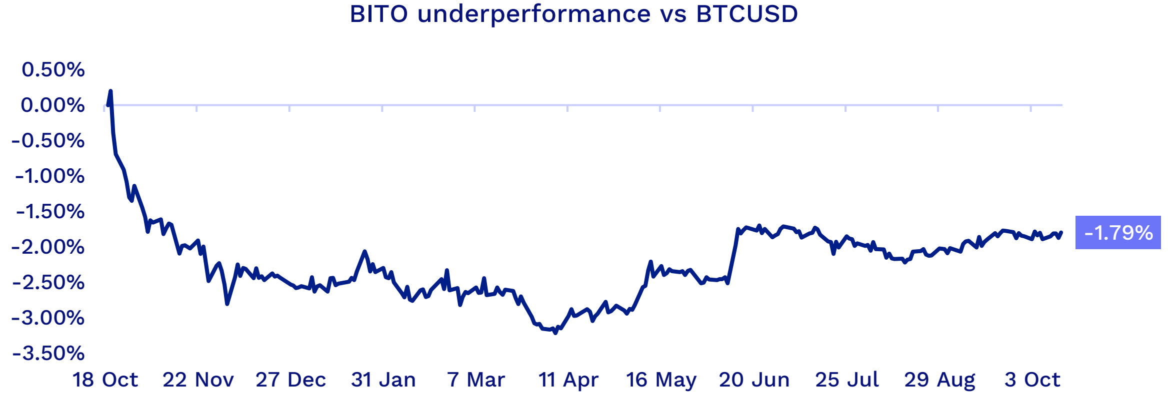
Source: Tradingview (Bitstamp)

Happy birthday BITO!

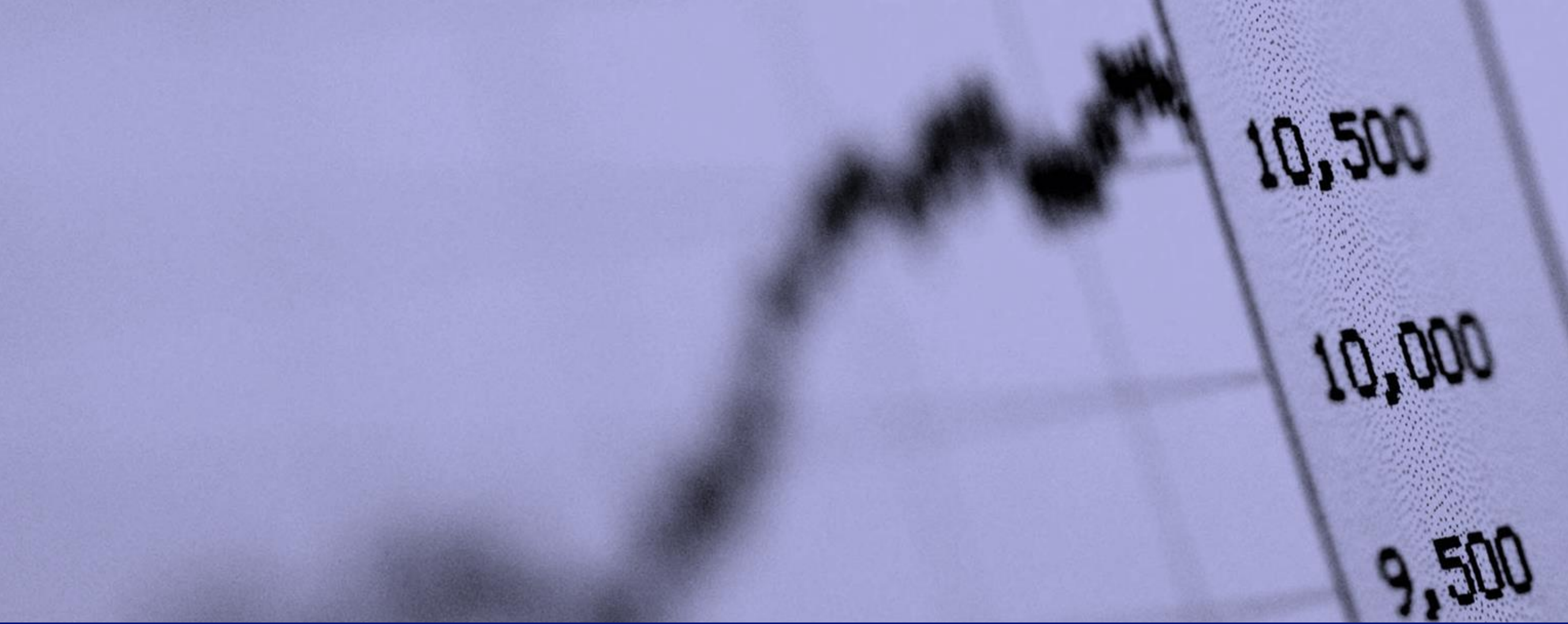
It's been one year since ProShares Bitcoin Strategy (BITO), the first U.S. futures-based BTC ETF, launched. Since its launch, the fund has underperformed BTC by 1.79% and currently holds CME contracts equivalent to 32,520 BTC.

- One year ago today, the first U.S. futures-based ETF launched. The launch was highly anticipated and likely a key source behind BTC's strong rally in early October. Two days after launch, BITO became the fastest ETF ever to reach $1bn AUM.
- However, enthusiasm later dwindled as the SEC rejected all direct spot-based BTC ETFs. Viable criticism of the SEC's decision to approve a less efficient tool of exposure has been prevalent in the market, leading Grayscale to sue the SEC.
- One criticism has been related to the rolling costs. Each month, ProShares has to roll over futures contracts from the front-month contract (current month settlement) to the next-month contract (settlement next month).
- After one year of trading, BITO has only underperformed BTC by 1.79%. While bad, the underperformance was far lower than estimated based on 2021 data, forecasting 13% annualized rolling costs. By December 3rd, BITO had underperformed BTC by 2.8%, meaning that rolling dynamics have played in investors' favor in 2022.
- Due to a structural market shift as BTC brutally entered a prolonged bear market after the massive liquidation event on December 4th, CME's futures have tended to trade in a flat structure with minimal contango and periodically in backwardation, as we elaborate in slide 14.
- ProShares' long BTC ETF currently holds a long exposure on CME equivalent to 32,520 BTC, and its all-time high BTC exposure occurred on August
- Since the launch, other futures-based ETFs have entered the market, gaining comparatively low traction. VanEck's futures-based ETF currently holds an exposure equivalent to 1075 BTC, while Valkyrie holds an exposure equivalent to 1095 BTC. ProShares has also launched a short ETF currently holding a short exposure of 4525 BTC.
- As we've previously elaborated: futures based BTC ETFs **represent half the open interest on CME,** and the day-to-day flow, in particular, related to the two most actively traded ETFs, both issued by ProShares, both provide directional market flavor, in addition, to directly impacting CME's futures basis.





Source: Tradingview, Proshares



Valuation

Bitcoin's trading range tightens below $20,000

The trading range for bitcoin is tightening even more this week, with bitcoin mostly trading between $19k and $20k. Bitcoin briefly touched levels below $18.5k for the first time in three weeks but quickly recovered.

- We're sticking to the same analysis for the third week in a row as bitcoin's trading range tightens even more this week.
- Bitcoin has mostly been trading between $19,000 and $19,500 over the past week, except for a 24-hour window last Thursday.
- The bitcoin price crashed to ~$18,100 along with equities as the latest inflation numbers in the U.S. came in above expectations. This was the lowest price seen since Sep 21st.
- The BTC price quickly recovered, and the support level we have been referring to lately held again.
- With the tight trading range, most traders will benefit from sitting on their hands until we break out above the resistance area or below the support level highlighted in the chart to the right.
- Only the very short-term traders betting on volatility were rewarded last week, as the price movement and volatility diminished after just a few hours of intense price actions. We still believe there is potential for a more extensive volatility play, with historically low volatility and a tight trading range.

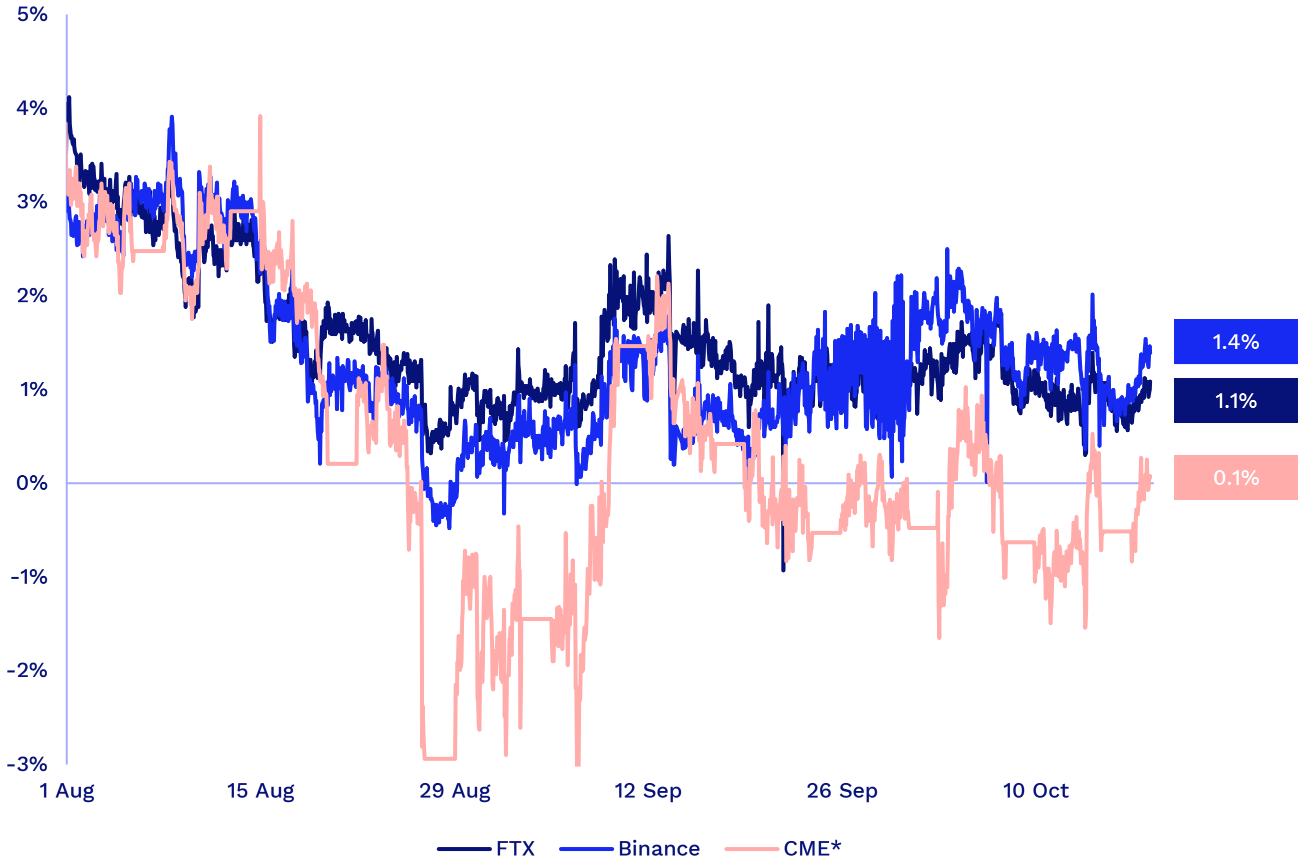
Source: Tradingview (Coinbase)

Futures market still idle

The state of BTC Futures remains unchanged from last week.

- The offshore futures basis remains flat compared to last week.
- The premiums were briefly impacted by the intraday volatility during the CPI release, reaching lows not seen since the FOMC but quickly recovered alongside BTC to 1%.
- Meanwhile, we note that CME's futures align with the spot market. Nevertheless, since late August, CME's futures have tended to trade below spot as institutional traders remain careful in the market.
- Related to CME's futures, we note that Nassim Taleb has closed his profitable BTC short without providing any explanation. BTC's extended losses, followed by a lengthy low volatility directionless environment, may have discouraged Taleb from maintaining his position due to the risks of a burst in volatility.

Bitcoin Futures Annualized Rolling 3-Month Basis



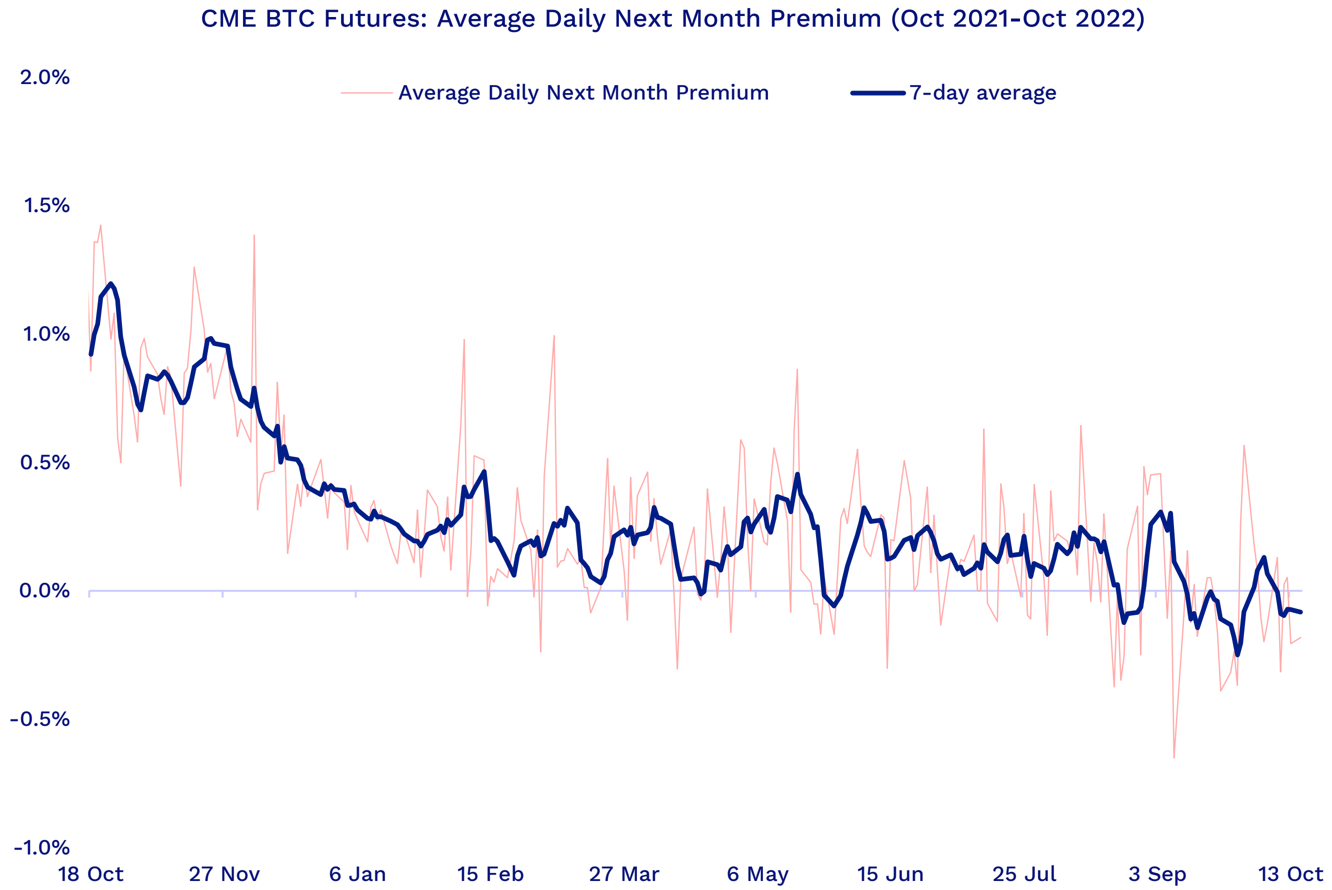
Source: Skew, Laevitas, Tradingview, CME

*Closed Saturday - Sunday

A flattening futures curve

Since the launch of the first U.S. futures-based ETFs, CME's futures curve has softened, leading to less extensive underperformance of BITO versus BTC.

- One year ago, the next-month futures contract on CME traded at a 1% premium to the front-month (nearest month) expiry.
- However, the futures curve has flattened during the bear market, leading further-dated futures contracts to trade closer to the nearest dated contracts, leading rolling costs to decline.
- Throughout the year, the next-month contract has tended to trade at a slight premium to the front-month contract, but this premium has declined in recent months, and since September, CME's futures structure has mostly trailed in backwardation.
- A state of backwardation benefits long ETFs such as BITO. Proshares sells the comparatively expensive contract (front month) to buy a cheaper contract (next expiry).
- In the next slide, we illustrate the same chart since January 1st, 2019, demonstrating the unusually flat state of the CME futures curve of late.

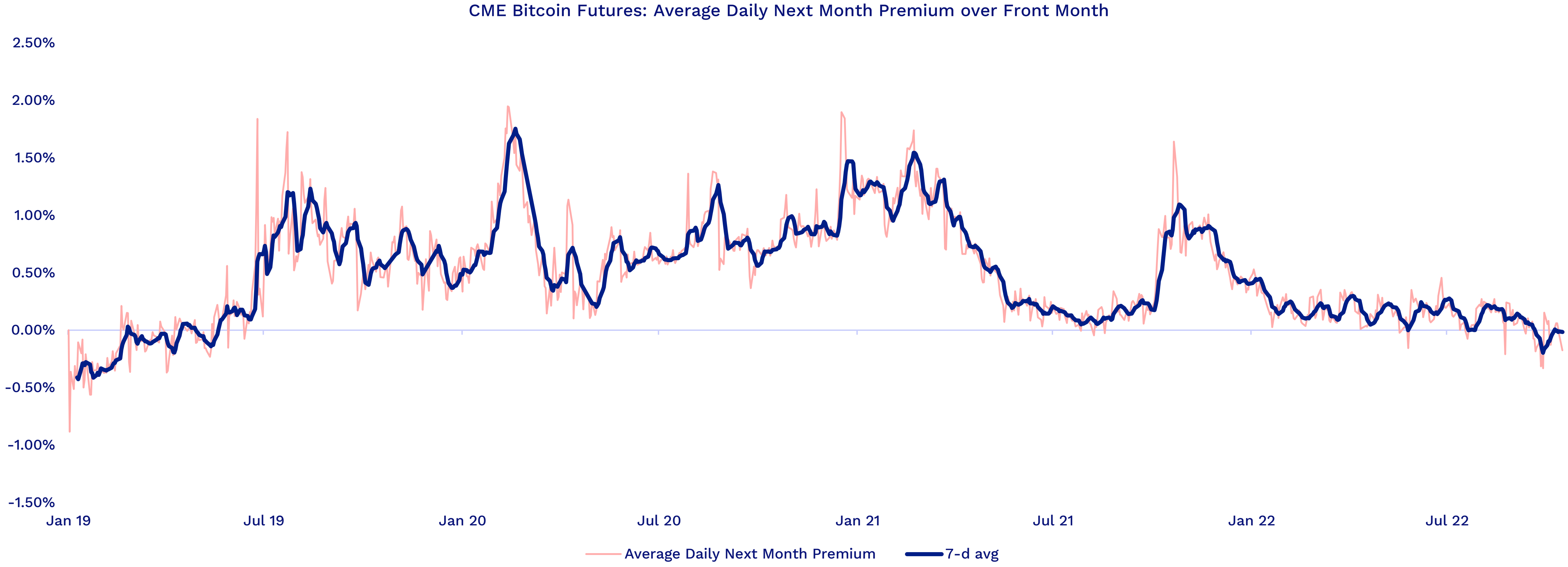


Source: Tradingview

*Closed Saturday - Sunday

CME in backwardation for the first time since May 2019

CME's futures structure has trailed in backwardation throughout September. This has not happened since May 2019. Evidently, from the chart, the next-month expiry contract tended to trade at a 0.5-2% premium to the front-month contract from the summer of 2019 until April 2021. Simplified, a steeper futures curve (i.e., a high next-month premium over front-month expiry) indicates a bullish sentiment. Short sellers require a higher carry premium for longer-dated expiries, and longs are willing to pay a higher premium. Likewise, a flat futures curve or a downward trending curve implies the opposite – longs require compensation for the risk of exposure in further dated and less liquid BTC contracts.



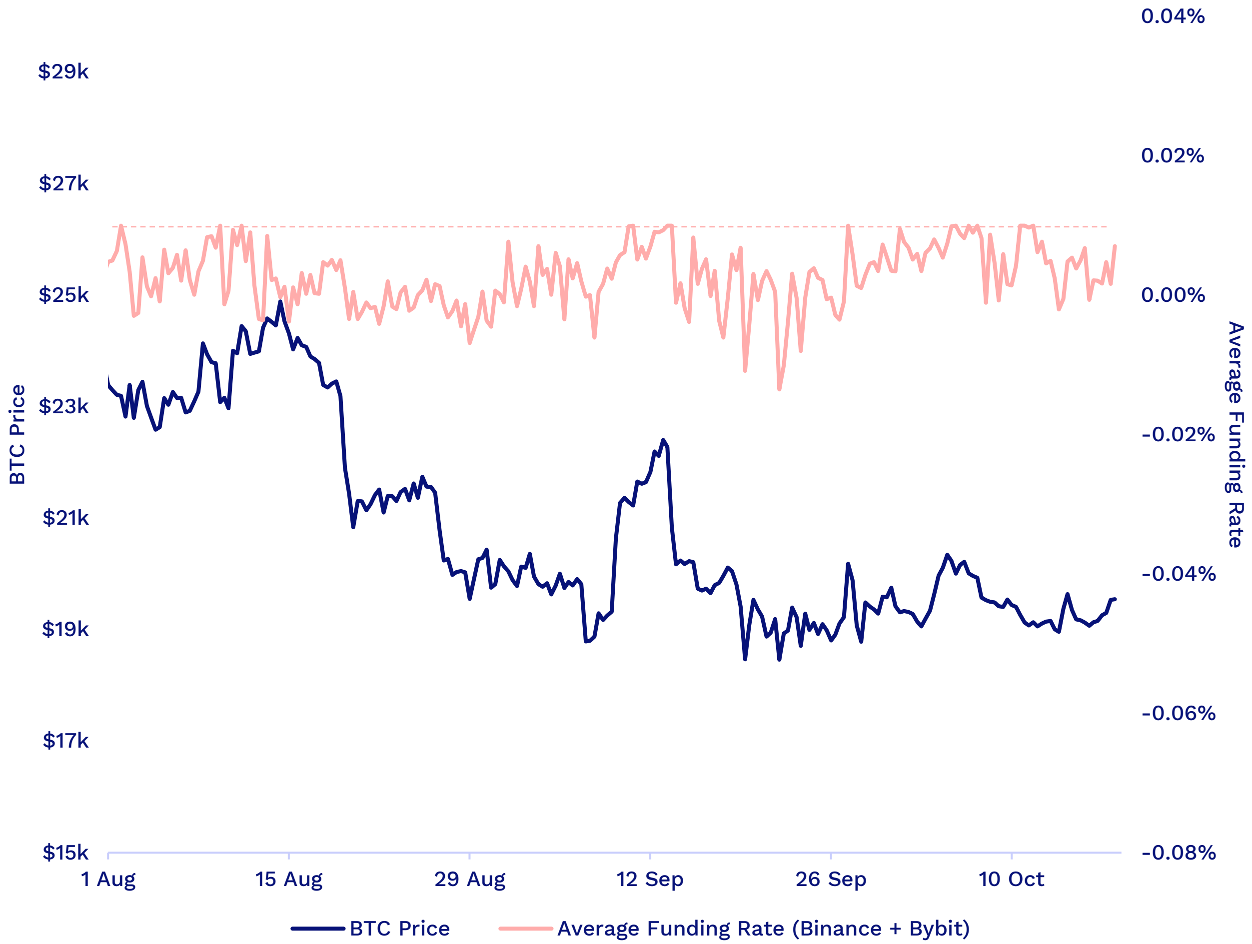
Source: Laevitas

Perps sticking to the status quo

Funding rates have mostly trailed below neutral in the last week.

- The intraday volatility introduced by the CPI release led funding rates to fall into negative territory as longs were liquidated amid BTC's push towards the lower $18,000.
- The BTCUSDT perp funding rates recovered to neutral levels on Monday as BTC stabilized above $19k, while Bybit's funding rates remained below neutral.
- The CPI volatility was followed by a decline in open interest, which reached an intraday peak of 539k BTC prior to the release before declining to 500k BTC in the following hours.
- Nevertheless, open interest has stabilized above 500,000 BTC. The relative leverage in BTC derivatives remains alarmingly high, and the market is exposed to volatility-enhancing squeezes.

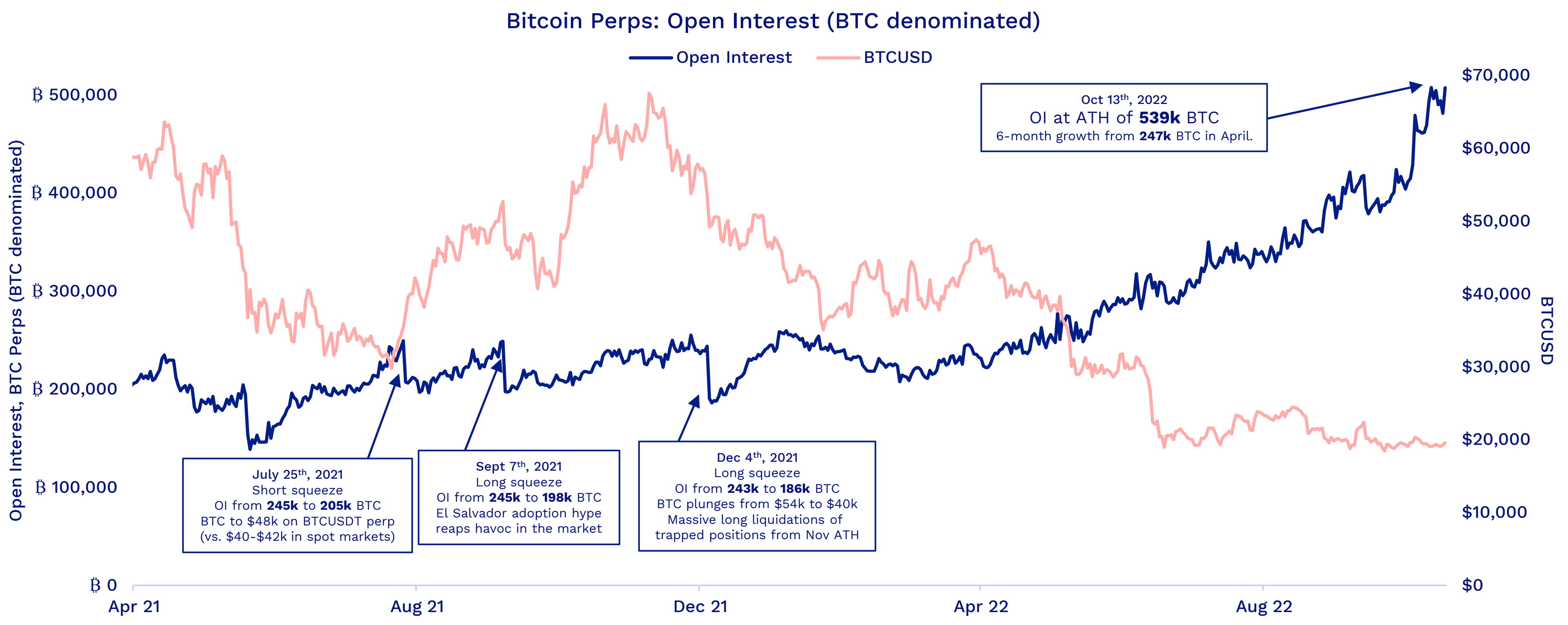
Bitcoin perpetuals: Funding Rates vs BTC Price



Source: Skew, Bybit, Binance

Open interest in BTC perps stabilizing above 500,000 BTC

Leverage remains exceptionally high in BTC perps. While CPI caused open interest to decline from an all-time high of 539,000 BTC, open interest has since stabilized slightly above 500,000 BTC. This highly unusual ever-growing leverage trend remains a potent volatility catalyst for the crypto market.



Source: Laevitas

Blockchain Activity

Bitcoin's hashrate continues higher, albeit difficulty adjustment

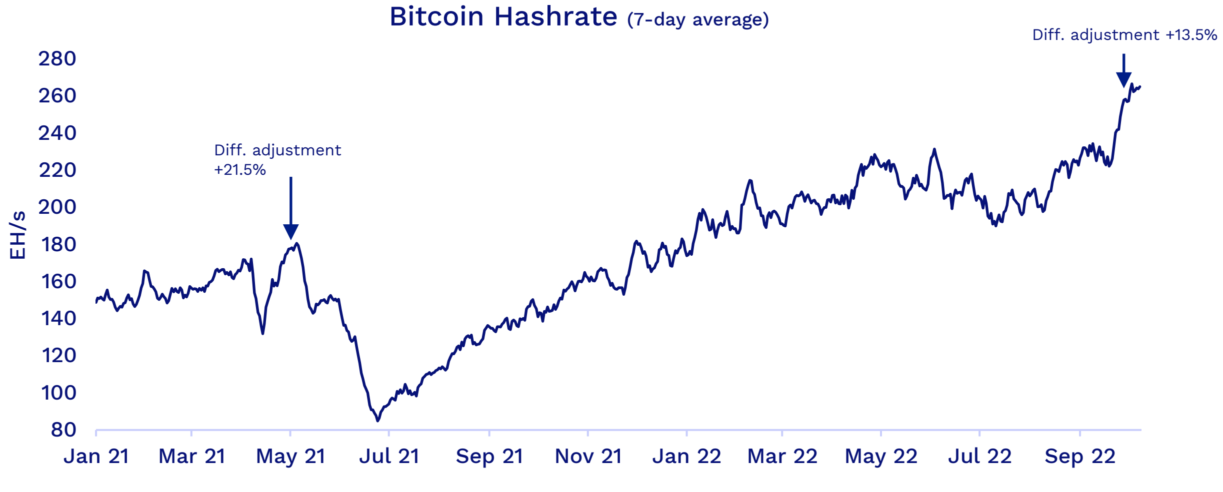
The difficulty adjustment last week did not stop the surging hashrate, as we've seen new highs lately. However, the block production rate is now closer to normal, seeing daily fees recover.

- Another all-time high for the Bitcoin hashrate last week, touching a 7-day average of 267 EH/s. The largest difficult adjustment since May 2021 did not scare miners, with more machines coming online.
- However, the diff. adjustment has seen the block production rate decline closer to the target level of 6 blocks per hour – showing the power of these difficulty adjustments.
- As a result of fewer produced blocks, the competition for getting transactions included has increased again, resulting in more fees generated for miners – up more than 25% over the past week.
- However, the lower block production rate has also seen the daily miner revenues decline to only $18 million per day.
- We still believe that the Bitcoin hashrate is forming a 2022 top at these highs. You can learn more about our hashrate predictions in this piece.

Powered by: BYTETREE

	Bitcoin Network Data	10/17/2022	7d prior	7d Change	30d Trend
Network	Daily Miner Revenues	$ 18,028,975	$ 20,749,837	-13.11%	
	Fees per day	$ 215,635	$ 172,063	25.32%	
	Fees % Revenues	1.20%	0.83%	0.37%	
	Daily TX Volume ($M)	$ 2,851	$ 2,880	-1.03%	
	Transactions per day	257,750	257,026	0.28%	
Utility	Avg TX value $	$ 11,060	$ 11,206	-1.31%	
	# Blocks per hour	6.17	6.96	-11.29%	
	Avg. # TX per block	1,740	1,735	0.28%	

Source: Bytetree

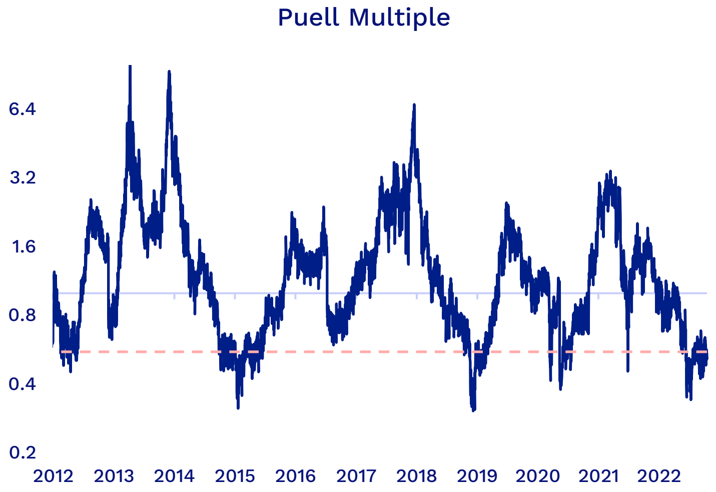


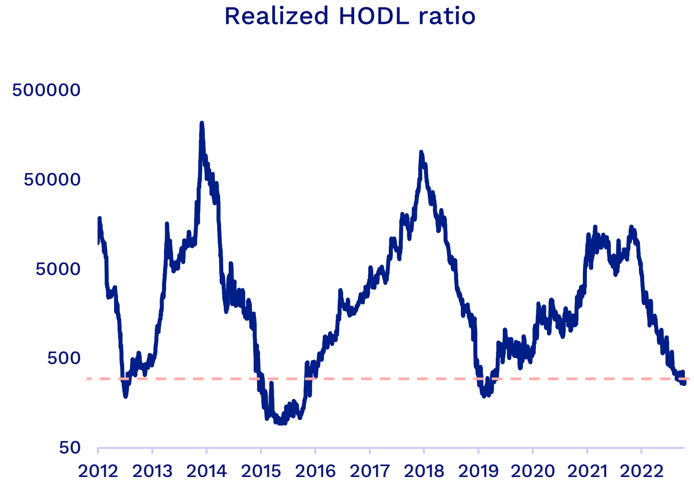
Source: Blockchain.com

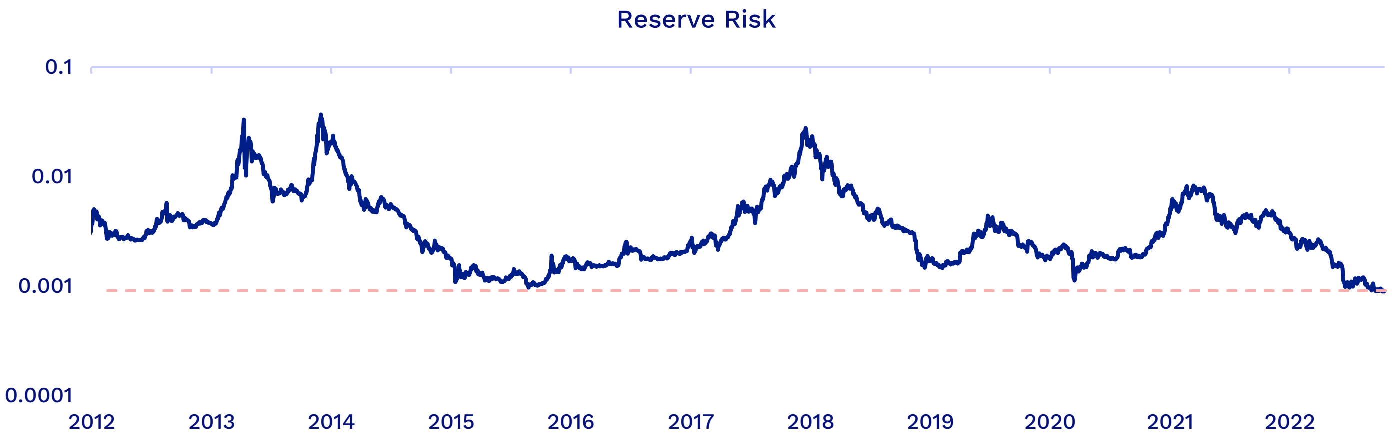
Bottom in? “All” on-chain metrics at all-time lows (Part 1)

Most on-chain market indicators signal that the bottom is already in.

- While we hold a skeptical view towards basing investment decisions on on-chain data, as elaborated more thoroughly in this piece, we note that more or less all on-chain market indicators sit at, or near, all-time lows, and we’re not cherry-picking charts.
- The Puell Multiple reached lows not seen since December 16th, 2018, on July 13th. This metric is calculated by dividing the daily issuance value of BTC by the 365-day moving average of daily issuance value. All previous occurrences of Puell Multiple values in the current ranges have occurred during bear market bottoms.
- The Realized HODL ratio looks at BTC hodling patterns measured by coin age and economic weight. A low reading occurs when the value of the coins moved within the last week aligns with the value of coins moved within the last 1-2 years. Currently, the RHODL ratio sits at levels coinciding with those of the bear market bottom of 2019.
- The reserve risk examines long-term holder patterns. A low reading of the reserve risk metric indicates that coinage is increasing (holders are hodling) despite falling prices. As prices fall, incentives to sell from long-term holders decline.
- The reserve risk metric is currently at an all-time low, indicating that the demand by long-term holders to sell is currently low. Anyhow, a key weakness with this metric is related to the financialization of BTC. Flows and supply dynamics in structured BTC products, cash, stablecoin-collateralized derivatives, and ETFs obfuscate the quality of data interpretation from on-chain metrics looking at coin age.



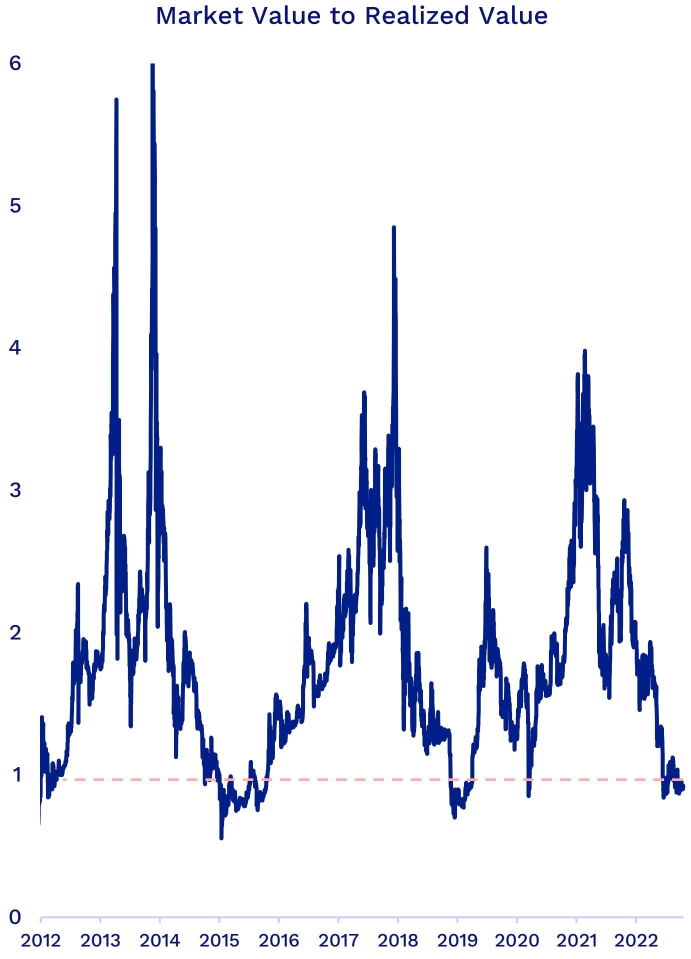


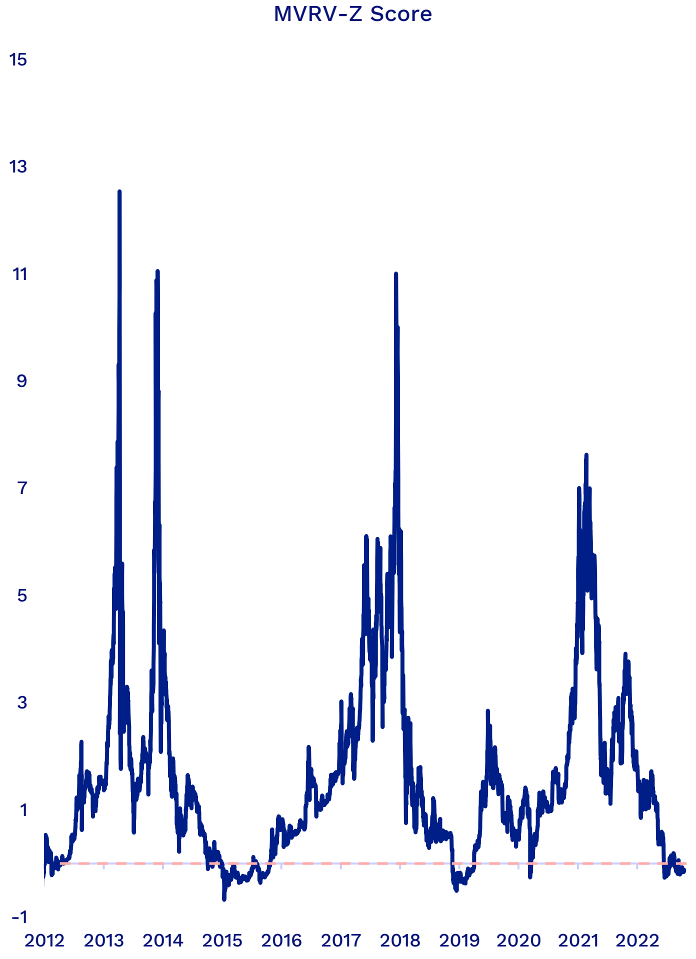


Bottom in? “All” on-chain metrics at all-time lows (Part 2)

Most on-chain market indicators signal that the bottom is already in.

- The market value to realized value (MVRV) metric shows the ratio between BTC’s market cap and the realized market cap. The realized market cap of BTC is found by calculating the value of each UTXO based on the price at which it was last moved.
- Currently, MVRV is below 1, meaning that the realized cap is higher than BTC’s market cap. Previous MVRV readings of below 1 have coincided with bear market bottoms in the last two bear markets.
- The MVRV Z-Score is used to assess when bitcoin is undervalued relative to its “fair value”. When market value is significantly lower than realized value, it has historically indicated market bottoms. The MVRV-Z ratio sits in a range coinciding with the bottoming terrain from 2015 and 2019.
- Most other on-chain metrics are also at or near all-time lows, in levels coinciding with previous bear market bottoms, despite BTC having seen a less intensive drawdown of 74% compared to the 84% and 85% drawdowns from previous bear markets.
- On-chain metrics are exposed to weaknesses related to the changing market structure in bitcoin trading and purely neglect external forces impacting investor confidence, such as the continuously pressuring macro conditions. Still, the fact that all metrics sit close to bottom levels indicates that from a pure BTC-centric valuation framework, current prices reflect a very attractive entry point for investors positioning for a new wave of BTC strength down the line.





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