

### SECTOR IN-DEPTH

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# Spot crypto ETFs draw institutional interest, despite risks

Interview with executives Clara Medalie and Dessislava Aubert of Kaiko, a cryptocurrency market data, analytics, indices and research firm, as part of our Bits, Bytes & Basis Points series. The views expressed by Kaiko are their own views and not those of Moody's.

### **Summary**

In our view, the SEC's greenlighting of spot Bitcoin exchange-traded funds (ETFs) this past January will likely encourage inclusion of digital assets in mainstream portfolios and boost institutional and retail investor participation in crypto markets. Improved liquidity will benefit the Bitcoin market by reducing price fluctuations and improving price discovery. However, Bitcoin can be volatile, and when approving the ETFs, the SEC said it was not endorsing the cryptocurrency. Regulators in Hong Kong recently approved the launch of spot Bitcoin and Ether ETFs, although trading volumes are not expected to match US Bitcoin ETFs.¹ Other jurisdictions are also considering Bitcoin-backed investment products. In March, the UK's Financial Conduct Authority said it would permit the creation of a UK-listed market segment for cryptoasset-backed exchange-traded notes, but only for use by professional investors.

We asked Clara Medalie and Dessislava Aubert of Kaiko to assess the effects of spot Bitcoin ETFs on retail and institutional investors and on broader cryptocurrency and traditional financial markets. Their responses are set out in question-and-answer format below and express their own views, not those of Moody's.

Below is a summary of key points from Kaiko's responses to Moody's questions.

**Volumes of spot ETF trading have surged globally since the launch of ETFs.** Since 11 January, Bitcoin trade volume has hit multiple new multiyear highs, at one point topping \$46 billion.

**Bitcoin liquidity has increased since the launch of spot ETFs.** Since January, as measured by market depth – the quantity of bids and asks on an order book – Bitcoin market depth has surged from approximately \$400 million to roughly \$500 million across all exchanges.

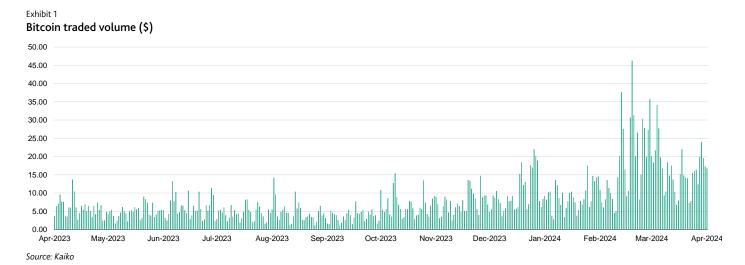
**ETFs can amplify market downturns.** If there is an event that triggers large outflows, ETF issuers will need to liquidate their holdings, which could weaken values in crypto markets.

**Bitcoin's halving will likely be positive for its price, if spot ETF inflows remain strong.** The launch of the spot ETFs has created a sharp reduction in Bitcoin's supply. Should ETFs continue to generate large inflows, there will be a bullish impact on Bitcoin's price post-halving.

# Q: How are Bitcoin spot ETFs influencing centralized exchange volumes in the US market, given the different fee structures?

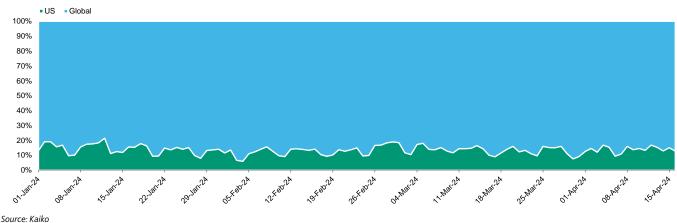
# Clara Medalie and Dessislava Aubert (Kaiko):

Since the ETF launch in January, spot volumes have surged globally, not just in US markets. We can observe that since 11 January, Bitcoin trade volume has hit multiple new multiyear highs, at one point topping \$46 billion (Exhibit 1).



When it comes to US vs. Global share of transaction volume on centralized exchanges (Exhibit 2, below), we can observe there has not been much change. As prices hit all-time highs, this also drew in traders to global platforms such as Binance or OKX, where more retail traders find a wider variety of trading opportunities. Many of the transactions directly related to the ETFs are taking place over the counter – that is, they are taking place directly between parties, without going through an exchange – which likely puts a damper on overall US volumes. However, the higher share for institutional exchanges like LMAX suggests that institutions have not totally abandoned the spot market.

Exhibit 2 US vs. global market share of Bitcoin trading volume



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# Q: Advocates of Bitcoin ETFs often highlight enhanced market liquidity as a major advantage. What level of liquidity does Kaiko anticipate with the introduction of Bitcoin spot ETFs, and is there any available data supporting this increase?

# Clara Medalie and Dessislava Aubert (Kaiko):

Since the ETF launch, we have seen a significant increase in Bitcoin liquidity, as measured by market depth. Market depth takes the quantity of bids and asks on an order book; higher values suggest a market is more liquid, and vice versa. Since January, the Bitcoin market depth has increased from approximately \$300 million to over \$400 million across all exchanges. (Exhibit 3).

Exhibit 3

Bitcoin aggregated 2% market depth (\$)

800

600

900

100

Source: Kaiko

4-Jan

11-Jan

18-Jan

25-Jan

1-Feb

8-Feb

US exchanges, in particular, have seen an increase in liquidity. The market depth for Bitcoin on Coinbase has climbed from an average of \$30 million in December 2023 to an average of \$45 million since the ETF launch. Coinbase has played a significant role in the ETF launch, serving as the official custodian and trading partner for most issuers.

15-Feb

22-Feb

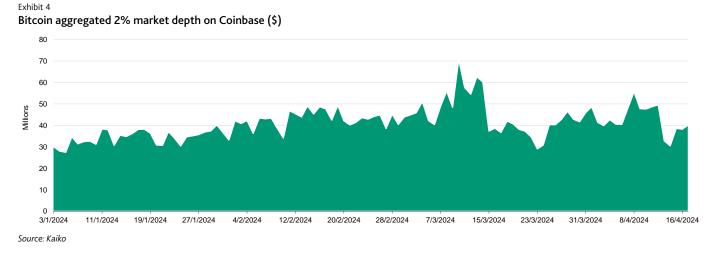
29-Feb

7-Mar

14-Mar

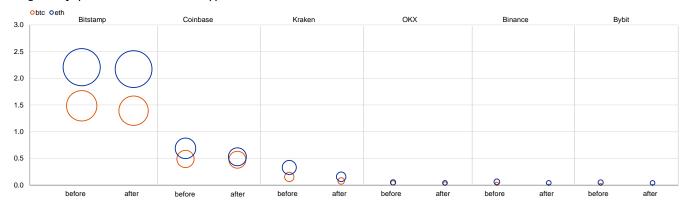
21-Mar

28-Mar



Additionally, spreads for both Bitcoin and Ether have improved on all major exchanges since the launch of the Bitcoin ETFs. This chart demonstrates that spreads were narrower after the ETF launches on most exchanges, which suggests markets are more liquid (Exhibit 5).

Exhibit 5
Bid-ask spread before and after the spot Bitcoin US ETF launch
Average 10-day spread before and after ETFs' approval



Source: Kaiko

# Q: In 2023, the prices of Bitcoin and Ether became less tied to the movements of the broader stock market. Could the creation of crypto spot ETFs either strengthen or weaken this trend?

## Clara Medalie and Dessislava Aubert (Kaiko):

It remains to be seen how incoming investors will treat Bitcoin as part of their portfolio; will they treat it as digital gold or as a risk asset? This treatment will likely have a significant effect on whether Bitcoin continues to decorrelate from equity markets. Regardless, it appears that an increasing share of Bitcoin trading will take place in traditional markets, which could reinforce Bitcoin's ties with the traditional macro cycle.

Over the past few months, we can see that Bitcoin's 90-day correlation with equities has continued to dip to multiyear lows (Exhibit 6). Both Bitcoin and equity markets have hit record highs over the past few months, but the reasons for this trend differ. Equities have responded to rising global risk sentiment, while crypto markets have surged following the ETF approvals. Daily price activity has diverged quite strongly, despite an overall similar trend, which explains the decorrelation.

Exhibit 6
Bitcoin's correlation with S&P 500 and Nasdaq 100 indexes

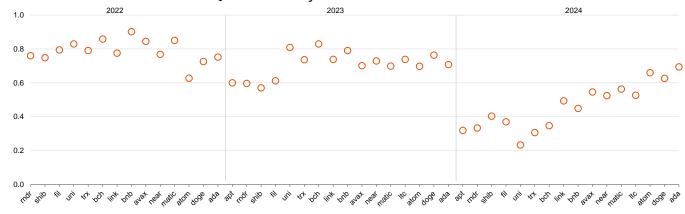


On the other hand, Bitcoin (and potentially Ether) is an entirely unique type of asset whose barrier to entry has just been lowered, if not outright eliminated. Recent inflows suggest that the ETFs unlocked demand that is asymmetric to traditional ETFs, which could further decorrelate the two.

In another interesting trend, Bitcoin has become increasingly decorrelated with altcoins – that is, cryptocurrencies other than Bitcoin – relative to previous years. Bitcoin's 60-day correlation with altcoins has fallen to multiyear lows in Q1 2024, in comparison to the same period in 2023 and 2022 (Exhibit 7). One cause of this decline could be rising institutional inflows into Bitcoin amid the launch of spot ETFs. Altcoins are increasingly competing for liquidity, and have not kept pace amid Bitcoin's rapid price gains.

Exhibit 7

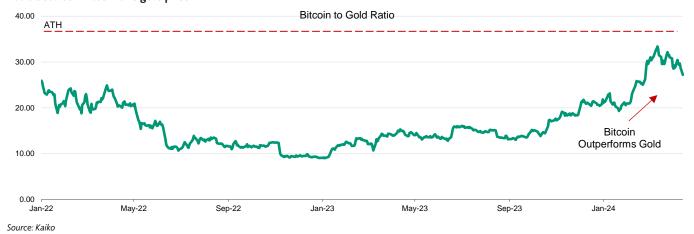
Correlation between Bitcoin and altcoins' Q1 returns of each year



Source: Kaiko

Bitcoin has also been strongly outperforming gold. The ratio between Bitcoin and gold, which gauges the relative performance of these assets, is nearing its previous peak recorded in November 2021 (Exhibit 8). This uptrend indicates that Bitcoin is surpassing gold in performance, even though both assets reached record highs in recent weeks. Moreover, since their launch in early January, Bitcoin ETFs have attracted a total of \$11 billion, while the largest physically-backed gold ETFs—SPDR Gold Shares (GLD) and iShares Gold Trust (IAU) — have experienced outflows.

Exhibit 8
Ratio between Bitcoin and gold price

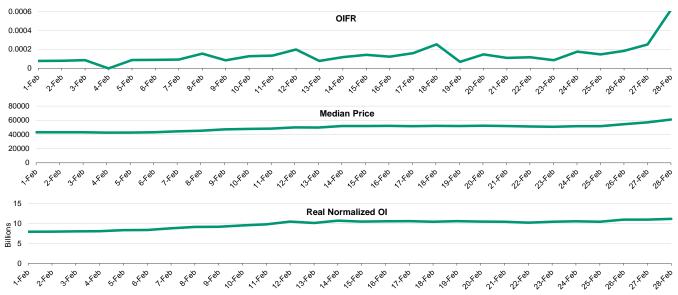


# Q: Is there a downside to potential expansion of the Bitcoin investor base as a result of spot ETF approval? For example, could it potentially amplify future market downturns? What data would shed light on this?

### Clara Medalie and Dessislava Aubert (Kaiko):

The sharpest market downturns – excluding those created by a shock like Terra's collapse – have been due to a combination of illiquidity, speculation and overheated derivatives markets. This happened at the end of February, when BTC rallied above \$64,000 then fell to nearly \$58,000 in the span of an hour, wiping out about \$1.5 billion in open interest<sup>2</sup> in the process (Exhibit 9).

Exhibit 9
Open Interest Funding Rates (OIFR)3, Real Normalized Open Interest4and Bitcoin price



Source: Kaiko

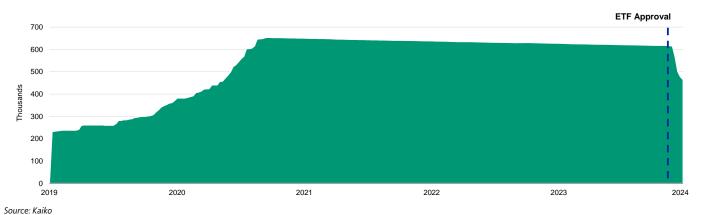
Before the rally and crash, funding rates<sup>5</sup> surged as traders took long positions, only for some of them to be liquidated shortly after as the funding rate fell back toward neutral. So, even though ETFs are now a significant segment of the market and will likely increase in importance going forward, derivatives on international exchanges like Binance and Bybit could continue to feed price swings.

ETFs could still push Bitcoin prices lower, especially if there is an event that triggers large outflows. ETF issuers will need to liquidate their holdings, which could weaken values in crypto markets. As such, while ETFs have certainly had a positive price and liquidity impact on crypto, they could still trigger market volatility.

For example, Grayscale, one of the largest Bitcoin holders that recently had their fund converted into an ETF, has seen a sharp dip in its holdings as long-term investors seek to exit their position (Exhibit 10). Most of these outflows have been offset by rising inflows into other ETFs, but this still demonstrates the risk that quick changes in an issuer's holdings can have on crypto markets.

Exhibit 10

Grayscale Bitcoin holdings in GBTC



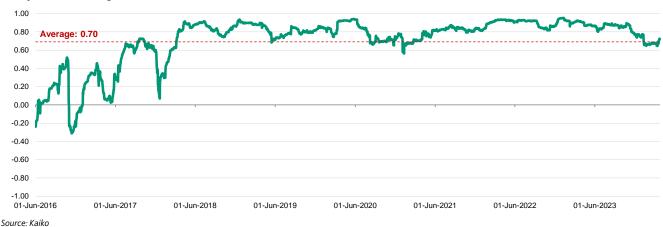
# Q: Now that several Bitcoin ETFs have been approved, an Ether spot ETF approval seems likely. Could this affect digital finance market dynamics, and how does it compare to the effects of a Bitcoin spot ETF?

## Clara Medalie and Dessislava Aubert (Kaiko):

As both Bitcoin and Ether have matured, their respective narratives have crystallized, creating two fundamentally different assets. Bitcoin's value proposition is clear – there will only ever be 21 million Bitcoin – while Ether's is more difficult to pin down, in large part because of ongoing changes to the network, the most recent major change being the shift in consensus mechanism from proof of work to proof of stake<sup>6</sup>. The increasing divergence between Bitcoin and Ether's narratives has also manifested itself in decorrelation of their prices. The two assets are being treated separately by investors, as demonstrated by decorrelating price activity (Exhibit 11).

Exhibit 11

Correlation between Bitcoin and Ether
60-day correlation of log returns



Additionally, the change from proof of work to proof of stake introduced native yield to Ether, allowing users to stake their tokens to secure the network while receiving tokens as a reward. Any early ETH ETF would not give access to this yield, which could be seen as a drawback. Finally, while they were launched in very different market environments, the launch day volumes of the BTC and ETH futures-based ETFs points to potentially less interest in a possible spot ETH product. In the chart below, we can observe that on the launch days of several ETH futures ETFs, trade volumes were negligible, compared with the BITO futures-based Bitcoin ETF, which had one of the highest volume days in the New York Stock Exchange's history (Exhibit 12).

Exhibit 12
Trading volume (\$) and Expense ratio of BITO vs. ETH Future ETF

Volume Day 1	ETF	Expense Ratio
\$1,170,207,277	BITO	0.95
\$864,591	EETH	0.85
\$494,508	EFUT	0.66
\$51,817	AETH	0.85

Source: Kaiko

Q: How do crypto derivatives provide distinctive opportunities for investment and capital allocation beyond traditional asset classes? In what ways can crypto derivatives amplify investors' access to specific market segments within the rapidly evolving digital finance sector?

### Clara Medalie and Dessislava Aubert (Kaiko):

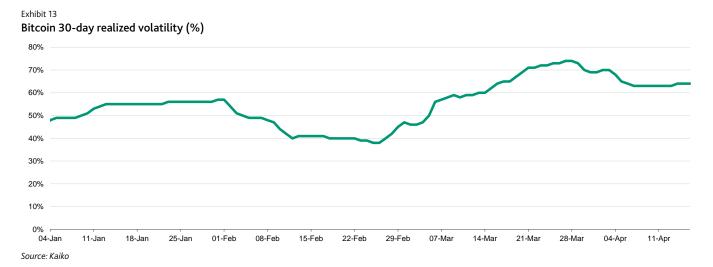
Crypto derivatives have made it easy for institutions and individuals to hedge or speculate without worrying about custodying their positions. One of the main innovations of crypto derivatives in particular is the creation of perpetual futures contracts, meaning that there is no expiration date. These contracts use funding rates to keep the price of the contracts in line with the price of the underlying asset. More loosely regulated exchanges have also rapidly listed new tokens and enabled traders to take on large amounts of leverage. These innovations have given access to a wide variety of tokens with different use cases, as well as enabled a range of trading strategies using funding rates and arbitrage.

Q: What key considerations could help investors better understand the risks associated with investing in crypto ETFs and crypto derivative products, keeping in mind, for example, past episodes of extreme volatility, as well as structural features of the crypto market and interlinkages with traditional finance?

### Clara Medalie and Dessislava Aubert (Kaiko):

Investors should understand that, although the market is maturing, crypto is still a relatively new asset class that is prone to volatility. However, volatility can be one of the main selling points of Bitcoin and other cryptocurrencies, because it can make it possible to earn high returns, although volatility – particularly for Bitcoin – declined during the last crypto bear market in 2022-23. In many respects, crypto is the ideal asset class for trading: markets never close, it is native to the internet, it is relatively easy to store, etc. So, while volatility might decrease as allocations to Bitcoin become larger and stickier, it seems unlikely that the cryptocurrency's volatility will permanently downshift in the near future.

Over the past couple months, 30-day volatility has continued to surge, which has attracted a wide range of traders, boosting volumes to multiyear highs (Exhibit 13).



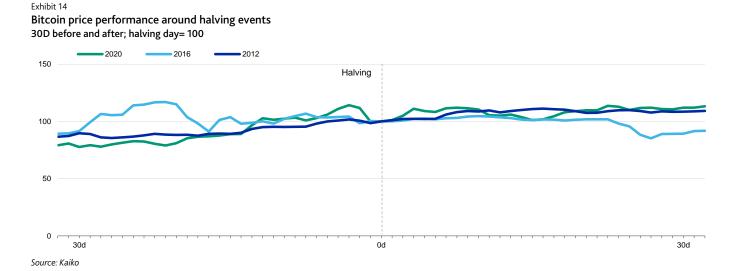
Q: Considering the impact of Bitcoin spot ETFs on market dynamics, how might the upcoming Bitcoin halving event be influenced by the increased accessibility to Bitcoin investment through ETFs? Could this accessibility affect the supply dynamics and price movements in the lead-up to and aftermath of halving events, especially in light of recent ETF approvals?

### Clara Medalie and Dessislava Aubert (Kaiko):

The upcoming Bitcoin halving event will reduce miner rewards to 3.125 Bitcoin per block. While the short-term price impact of the halving has been mixed in the past, Bitcoin tends to increase in the nine to 12 months post-halving, making it a generally bullish event (Exhibit 14).

However, this time Bitcoin has a significantly different supply/demand dynamic thanks to the launch of the spot ETFs. This has created a sharp reduction in Bitcoin's supply as issuers accumulate to feed massive interest in these investment vehicles. This change has helped propel Bitcoin to record highs, which has not typically occurred in the run-up to the halving.

Should ETFs continue to generate large inflows, we can expect a bullish impact on Bitcoin's price post-halving. However, if a change in sentiment were to trigger outflows, this could impact long-term price performance.



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### **Endnotes**

- 1 Reuters Hong Kong gives initial approval to first bitcoin, ether spot ETFs, 15 April 2024.
- 2 Open Interest is a metric that monitors the total number of open positions in a specific cryptocurrency derivative contract.
- 3 The Open Interest Funding Rate is the open interest weighted funding rate.
- $\underline{\mathbf{4}}$  The Normalized Open Interest is the value of the open interest in USD.
- 5 The funding rate is a periodic payment exchanged between buyers and sellers in perpetual futures contracts, which have no expiry date. This rate aims to ensure the perpetual contract price remains aligned with the Bitcoin spot price, balancing the market by adjusting the cost of holding positions.
- 6 "Proof of Stake" refers to the mechanisms by which validators maintain the Ethereum network. In the Proof of Work system, network validators put their competitors to "work" to secure the network. With Proof of Stake, they "stake" their crypto assets (exactly 32 ETH), thus keeping the network secure by aligning financial interests.
- 7 Staking can be thought of as a type of investment as the longer investors stake their ETH, the more rewards they earn. This can be considered an investment that supports Ethereum network's security.

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