

Q4 2023

Kaiko Research

# Quarterly Market Report

A data-driven recap of the most significant events in cryptocurrency markets.



Subscribe to our research [here](#).

[kaiko.com](https://kaiko.com)

# Data Solutions Trusted by Industry Leaders



Since 2014, we've solved complex data challenges to provide the highest-quality services. Our trusted market data, indices, DeFi data and analytics power use cases across the investment lifecycle for crypto-native and financial institutions. For each of our enterprise clients, we build custom data plans and offer integration support. [Contact us](#) to get started today.

**100+**

CEXs and DEXs

**20+**

Data Types

**>99%**

API uptime



**Petabytes**

Of Tick-Level Data

**10+ yrs**

Historical Data

**260,000+**

Spot, Futures, & Options



## Bring Your Ideas to Life



### Trading

Build powerful strategies with highly-granular data.



### Financial Products

Design innovative products with reliable prices.



### Market Infrastructure

Seamlessly integrate data into your platform.



### Tax and Accounting

Stay compliant with reporting requirements.



### Government

Enhance market oversight and enforcement.



### Research

Produce original and in-depth market analysis.

# Q4 Timeline

## October

**October 2**  
Grayscale files to convert ETHE into spot ETF and SEC approves ETH futures ETFs

**October 3**  
The FTX trial begins

**October 16**  
BTC jumps above \$30k after false BTC ETF approval news

**October 19**  
SEC decides not to appeal Grayscale decision, drops lawsuit against Ripple executives

## November

**November 3**  
Sam Bankman-Fried found guilty on all 7 counts

**November 10**  
Poloniex suffers \$100mn hack

**November 16-17**  
BlackRock and Fidelity file for ETH spot ETF

**November 21**  
Binance agrees to pay \$4.3bn fine to U.S. regulators to settle charges

## December

**December 6**  
Société Générale lists its euro stablecoin

**December 7**  
Robinhood rolls out crypto trading in Europe

**December 14**  
Ledger suffers an exploit

**December 15**  
SEC denies Coinbase's rule-making petition, Coinbase appeals the decision

**December 18**  
SEC delays several spot ETH ETFs until May 2024

**December 28**  
Judge rules Terra and LUNA are securities

# Table of Contents

Analyst Commentary - 4

## **Breaking Down the Crypto Rally**

*Bitcoin soars on ETF hype - 5*

*Altcoins join the rally - 6*

## **Bitcoin Liquidity**

*Will ETFs improve BTC liquidity? - 7*

*Volume fails to hit pre-FTX levels - 8*

## **Binance's Legal Saga Comes to An End**

*Binance loses dominance - 9*

*Offshore exchanges benefit - 10*

## **Timeline Highlights**

*Solana in the limelight - 11*

*Derivative markets take off - 12*

*The Coinbase Premium resurfaces - 13*

*DEX activity picks up - 14*

# Analyst Commentary



**Clara Medalie**

[@Clara\\_Medalie](#)

## It's All About ETFs

Bitcoin closed 2023 as one of the best performing financial assets of the year, up an astounding 150%, surpassing nearly all equities. This stark turnaround kicked off in October after a rumour about a spot-based ETF approval went viral. The rumour ended up

being false, but markets didn't seem to care. Spot ETF speculation officially became the single biggest catalyst driving markets. To close the year, there are 14 asset managers hoping to win SEC approval for an ETF and the first could come as soon as January. So will the rally continue should one be approved? I suspect markets may be pricing in an approval and there won't be as big a bounce as expected. The first day of trading could be indicative of the rally's legs.



**Dessislava Aubert**

[@DessislavaIane2](#)

## Altcoins Rally as Macro Conditions Improve

The end of 2023 was marked by a change of tone from the US Fed, boosting a rally in bonds and equities. While crypto has been mostly uncorrelated to traditional assets in 2023, improving global risk sentiment helped boost speculative pockets of crypto

investors, helping the BTC rally overflow to altcoins. Altcoin trade volumes gained momentum in November after lagging behind BTC for most of the year, and several tokens such as SOL and ETH saw a big returns. Memecoins even saw a resurgence. It is clear that risk appetite is improving, bolstered by possible rate cuts and falling inflation. However, liquidity remains well below its 2022 levels, potentially leading to increased volatility as speculative interest grows.



**Riyad Carey**

[@riyad\\_carey](#)

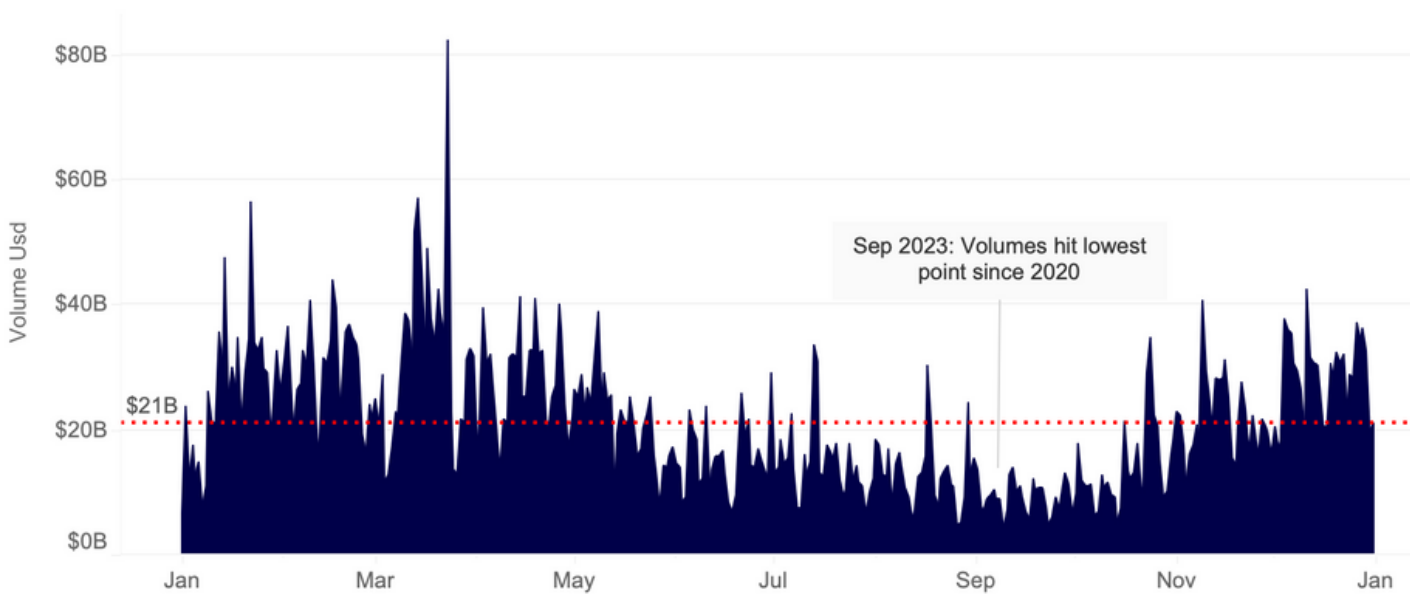
## Being On Chain is Fun Again

For much of the past two years, there was a palpable lack of excitement and optimism on-chain. For months, it seemed the only stories were exploits and gas fees. Crypto can be many things, but it should never be boring. Solana's comeback has breathed

new life into the on-chain realm, recapturing the feeling from Ethereum's DeFi Summer in 2020, in the process bringing back yield farming, memecoins, and airdrops. This time, though, many of the available protocols are highly polished, and there are seemingly endless new networks to explore. Sure, virtually none of these solve real-world problems. But they're fun, and maybe that's good enough.

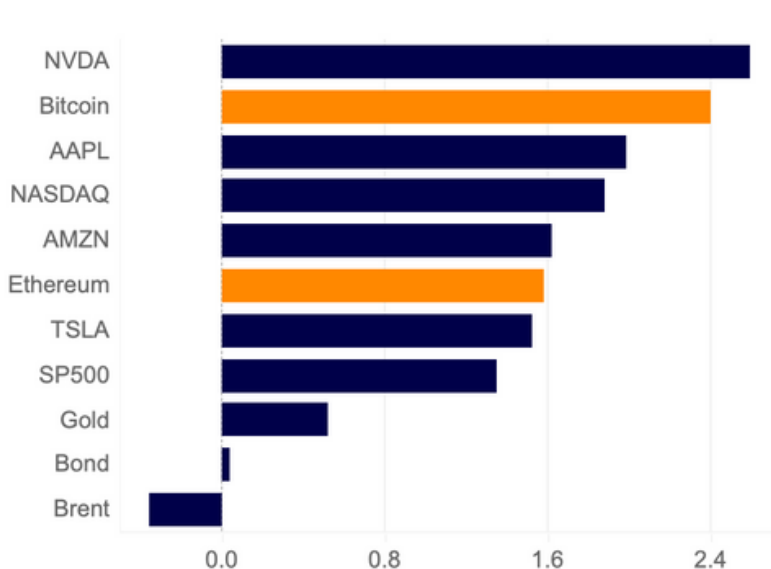
# Bitcoin Soars on ETF Hype

## BTC Trade Volume in 2023



In Q4, we finally observed a real shift in market structure. Throughout the summer, trading volumes were low, volatility was even lower and the markets seemed to be stuck in a rut. That all changed in mid-October with a false rumor about a bitcoin ETF. Boosted by a wave of spot ETF filings, hype and speculation propelled BTC to levels not seen since May 2022. The rally gained traction in November, with trade volumes finally breaking the annual average. Rising trade volume is a strong indicator that a rally has legs, but it remains to be seen whether an approval will cause a sustained surge in activity or just a temporary pop.

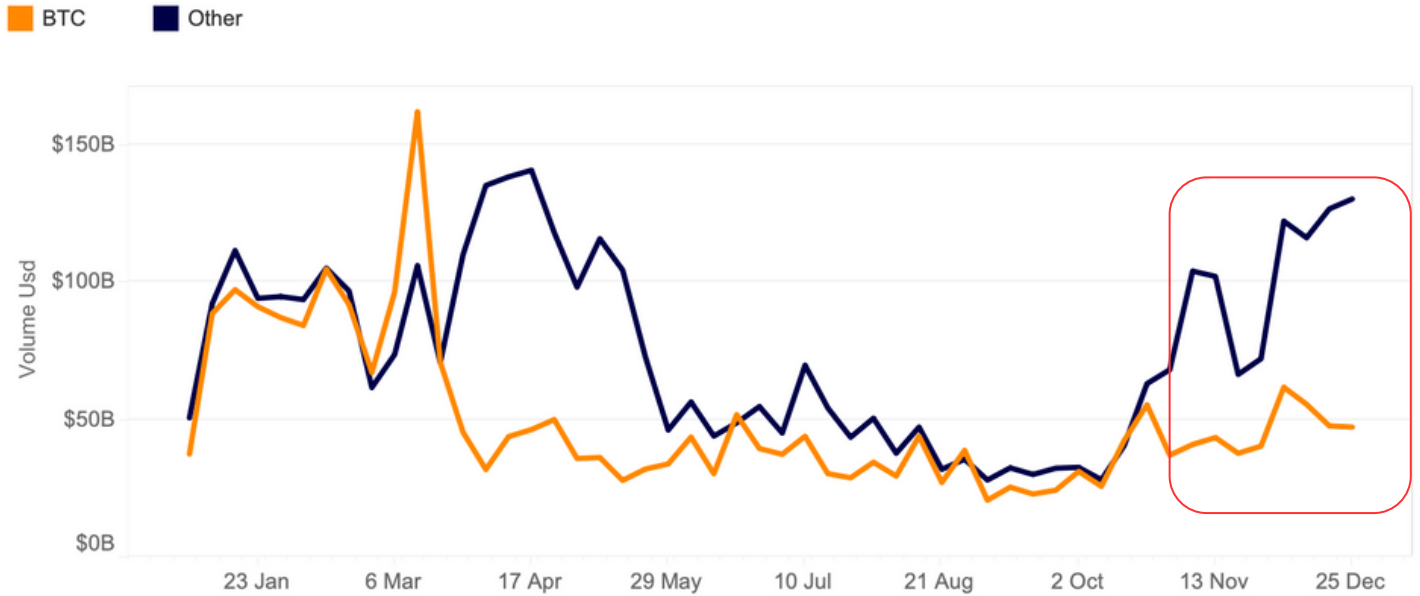
## YTD Sharpe Ratio



BTC is one of the top performers in risk-adjusted terms this year, showing resilience to a strengthening U.S. dollar and a surge in risk-free rates. The Sharpe ratio is a measure of the compensation investors receive for volatility (i.e. risk). BTC's Sharpe ratio surpassed most equities, likely due to a steady decline in volatility, which hit multi-year lows this summer, followed by surging prices.

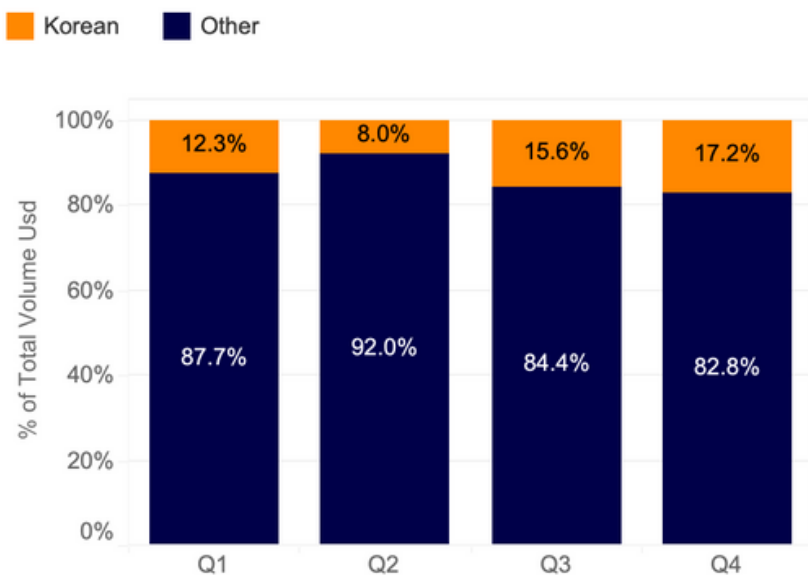
# Altcoins Join the Rally

## Altcoin Weekly Trade Volume



In November, the BTC rally spread to altcoins, boosted by an improving macro environment. As traders shifted into riskier assets, altcoin trade volume surged to more than \$130bn at the end of December, its highest level since April 2023. Volumes surpassed BTC’s by more than double, boosted in part by Korean exchanges, known for huge altcoin activity. While Binance’s influence has fallen this year, altcoin volume continues to be driven by offshore markets such as Bybit and OKX.

## Market Share of Altcoin Volume

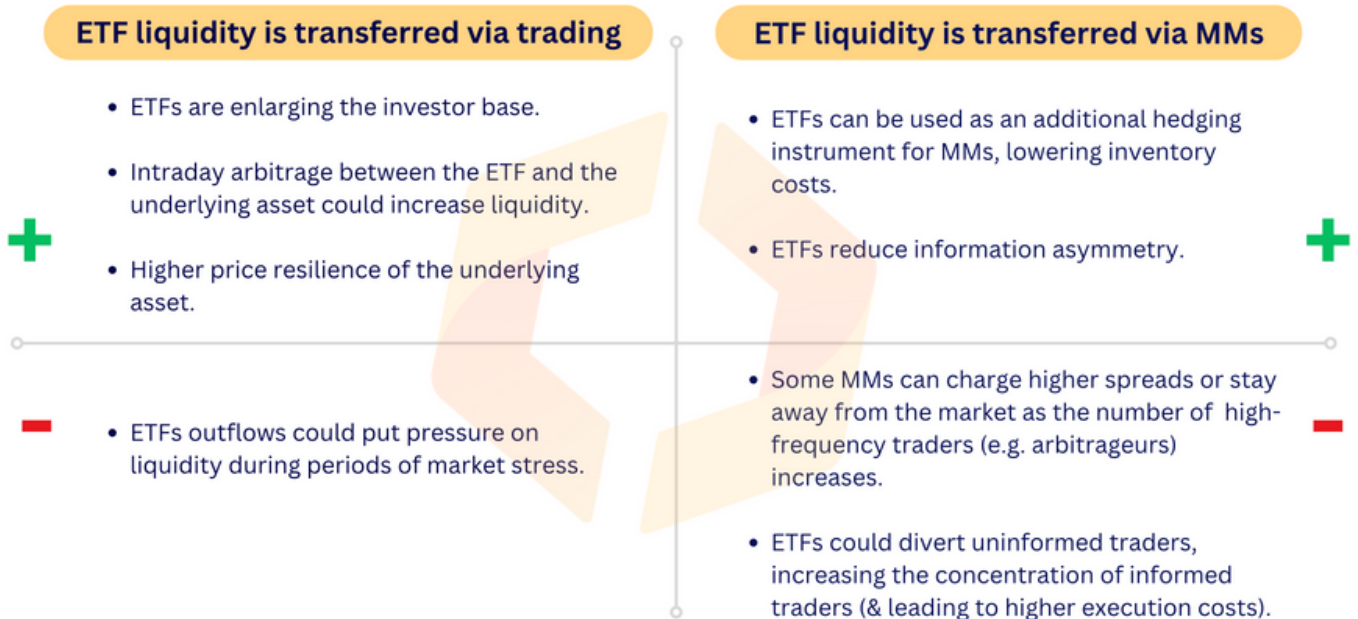


Korean markets are dominated by altcoins and typically see a greater surge in volume in risk-on environments. In Q4, the market share of altcoin trade volume on Korean exchanges relative to all others rose to 17%, up from 12% in Q1.

The increase was driven by a combination of improving risk sentiment and lower fees, with both Bithumb and Korbit rolling out zero fee promotions.



# Could ETFs Boost BTC Liquidity?



Source: Saæglam, Mehmet; Tuzun, Tugkan; Wermers, Russ "Do ETFs increase liquidity", <https://www.econstor.eu/bitstream/10419/232547/1/175260993X.pdf>

There’s no sugar-coating the facts: both volumes and order book depth have dropped across the board, for all assets, on all exchanges since the collapse of FTX. Even the latest market rally has failed to resuscitate BTC market depth or volume to pre-FTX levels. But, with a possible spot ETF approval, there is hope that liquidity could soon see a real recovery (despite some risks of a negative impact). There are multiple ways this could happen: liquidity could be transferred via trading, via market makers, or both.

## BTC 1% Market Depth

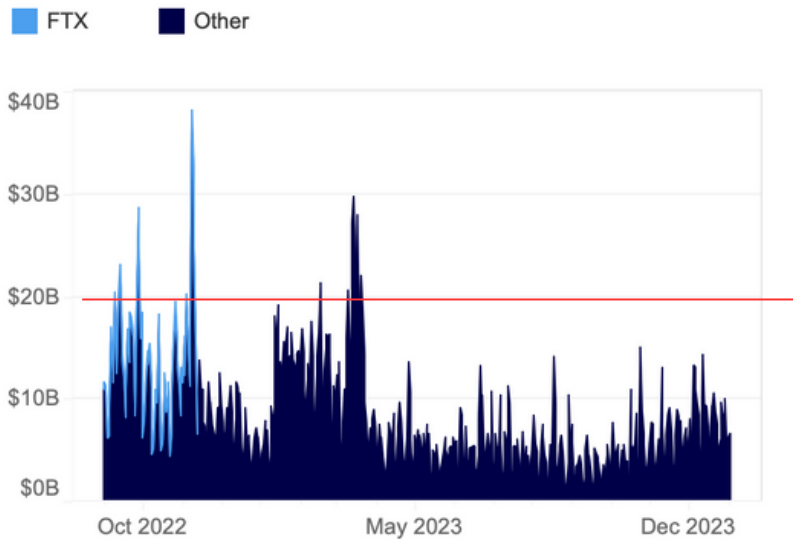


The FTX collapse caused a massive drop in market depth for BTC. Not only did the sudden disappearance of FTX literally reduce liquidity, but market makers also closed positions on many exchanges amid heavy losses and a difficult market environment. 1% market depth, which measures the quantity of bids and asks on order books within 1% of the price, has fallen from \$580mn across all exchanges to just \$210mn.



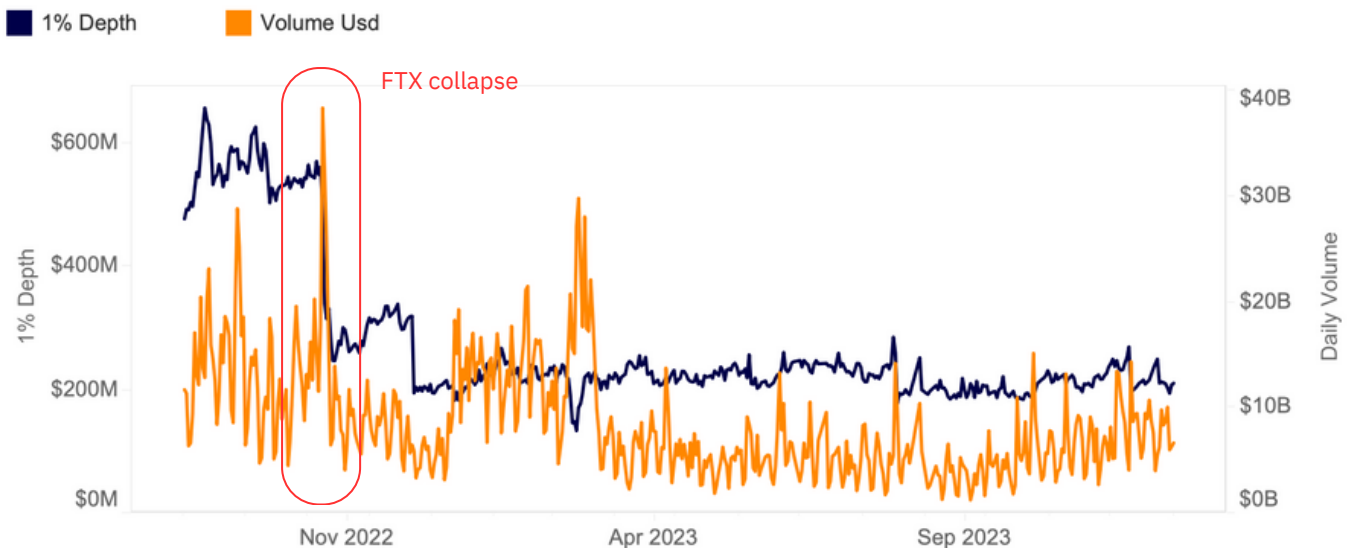
# Volume Fails to Hit Pre-FTX Levels

## BTC Daily Trade Volume



FTX had a much smaller impact on trade volume than market depth, accounting for less than 7% of global volumes. Since last November, volumes have fluctuated quite a bit. For the first three months of 2023, volumes remained elevated before crashing in the aftermath of the March banking crisis, hitting multi-year lows over the summer. In Q3 and Q4, we finally saw a resurgence in volume, but ultimately it remains below pre-FTX collapse levels.

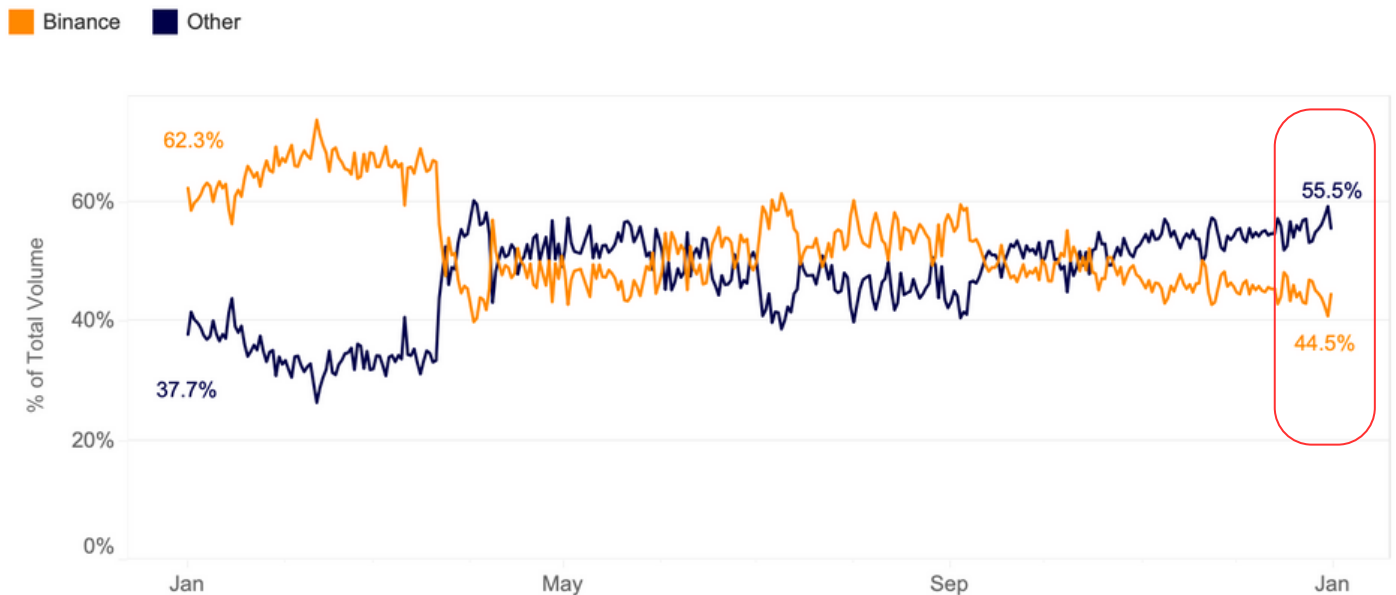
## Bitcoin Trade Volume vs. Market Depth



When comparing volume to market depth, we can observe that depth had a much more extreme drop since November 2022, but has been a lot less volatile throughout the year than trade volume. This suggests that the level of market making activity has stayed the same, without any new entrants (or exits). Ultimately, an ETF could have a positive impact on both volume and depth, which could create a more sustained shift in market structure.

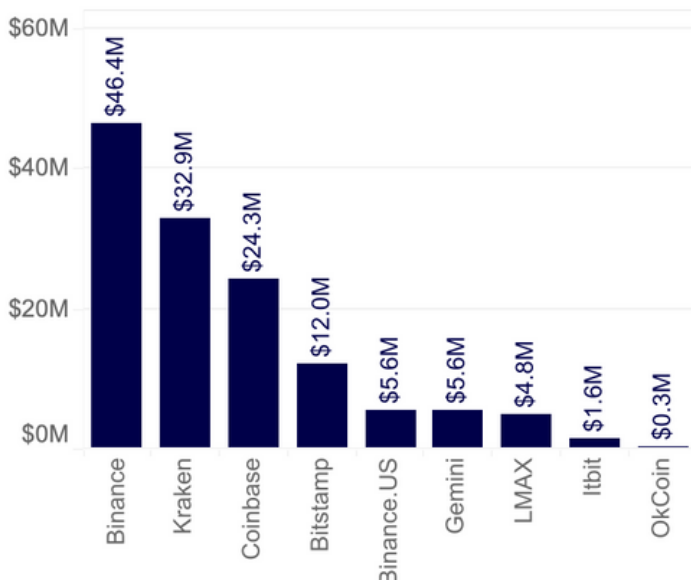
# Binance Loses Dominance

## Market Share of Trade Volume



At the end of November, after months of legal wrangling, Binance finally agreed to a historic \$4.3bn settlement with the U.S. Justice Department, closing an investigation that had weighed on the crypto industry. From an outsider's perspective, the settlement proved grim, but within the industry, there was a sigh of relief knowing that Binance is still able to operate, albeit with increased restrictions and the dismissal of its CEO. Yet, the legal troubles still caused a notable impact on the exchange's volumes. After hitting a multi-year high of 74% in February, Binance's market share has been on a steady downward trend in Q4, suggesting the exchange is benefiting less on a relative basis from the latest rally.

## Average Daily BTC 1% Market Depth

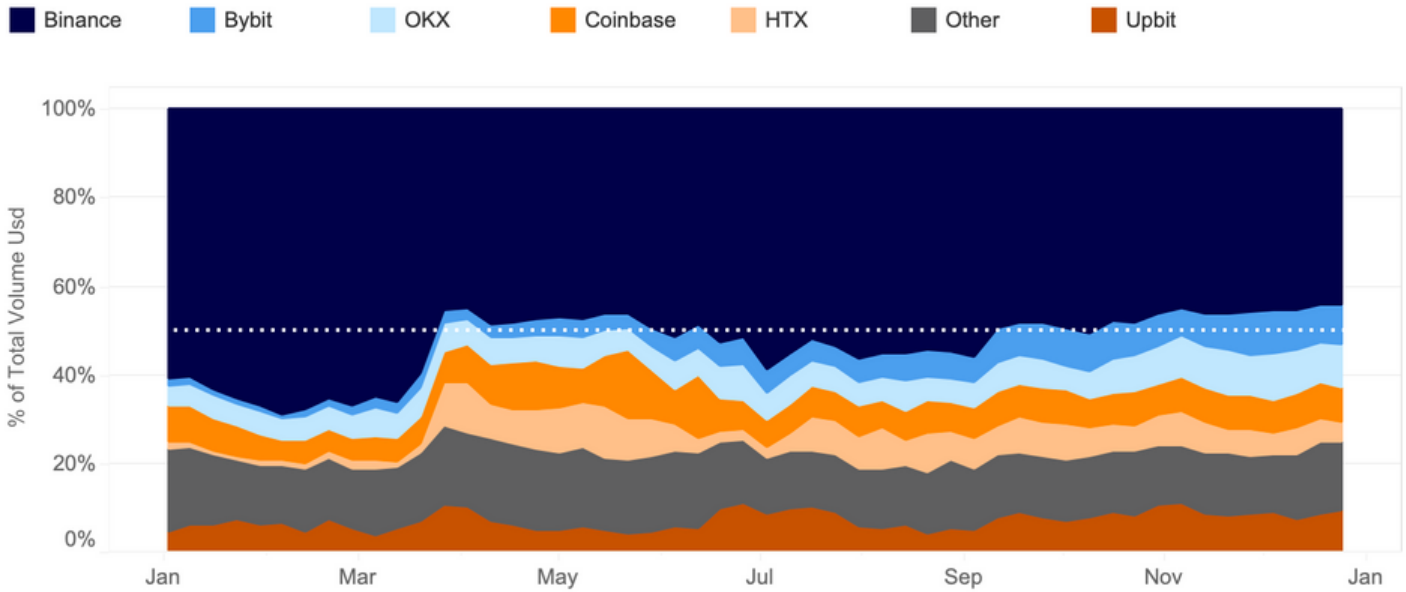


Even though Binance's influence has declined, it remains the largest and most liquid BTC market. Its average daily 1% market depth stood at more than \$46mn in 2023.

This compares to \$33mn for the most liquid U.S.-available platform, Kraken, and \$24mn for Coinbase. Overall, 60% of BTC liquidity is concentrated on offshore markets.

# Offshore Exchanges Benefit

## Market Share of Trade Volume



Binance's falling dominance has opened opportunities for other offshore platforms to capture a larger market share. In 2023, Bybit saw its market share increase from 2% to 9% while OKX and Upbit market share doubled to 10% and 9% respectively. Interestingly, the two largest U.S. exchanges – Coinbase and Kraken – have not experienced a significant change in market share this year, suggesting they cater to a different user base.

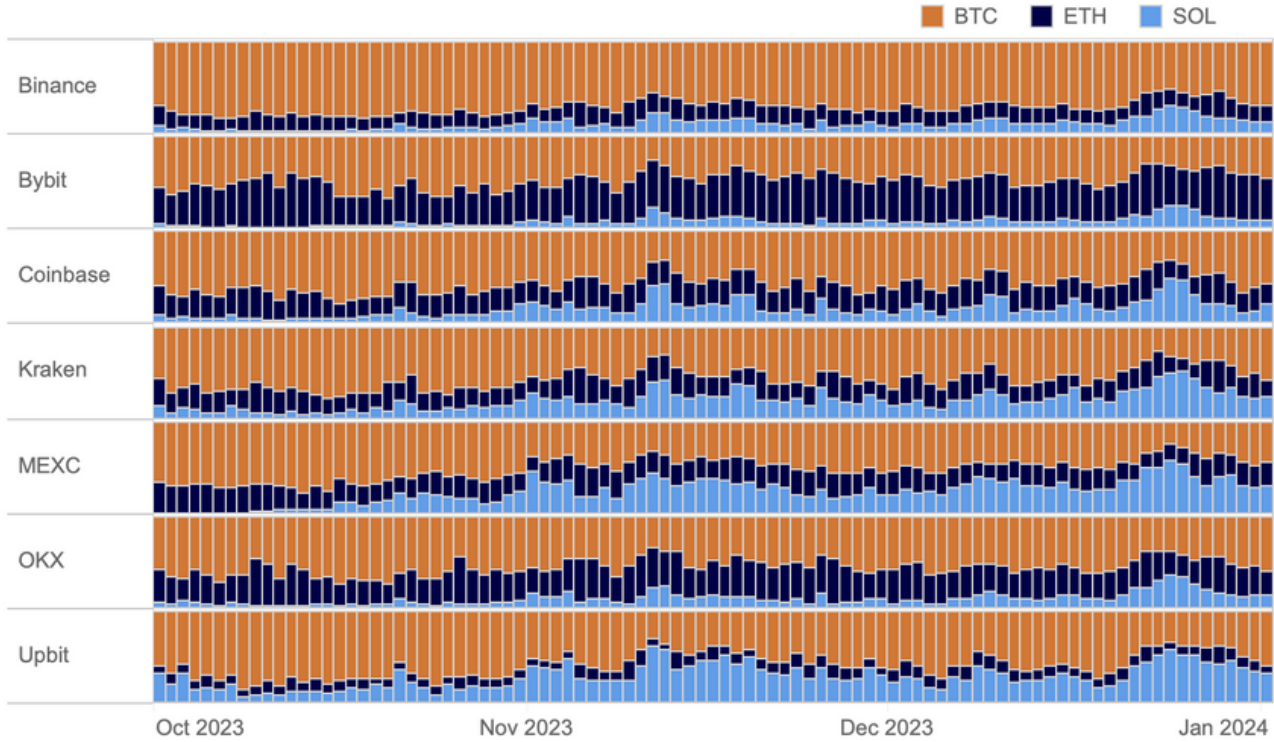
## BUSD Market Share on Binance



In December, Binance announced that it would discontinue support for BUSD. The move had been expected after BUSD's issuer, Paxos, was ordered by U.S. regulators to stop minting the token in February. BUSD's market share fell below 1% for the first time since 2019, a staggering drop from over 30% at the beginning of 2023. USDT has been the main beneficiary from the demise of BUSD, despite Binance promoting several small stablecoins like FDUSD in 2023.

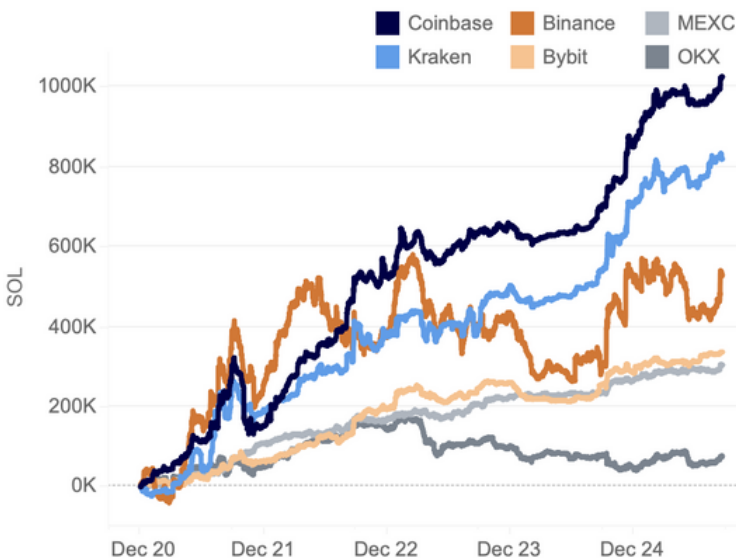
# Solana in the Limelight

## BTC, ETH, and SOL Volume Market Share



SOL may be one of crypto's greatest comeback stories, climbing from \$10 at the start of the year to a high of \$121 in December. In an unprecedented turn of events, SOL registered more volume than BTC and ETH combined on multiple exchanges. Coinbase, Kraken, MEXC, and Upbit all logged at least one day where this was the case. While Binance had multiple days where SOL's volume was greater than ETH's, SOL never surpassed BTC and ETH combined, registering a max of 31% share relative to the other two on December 24.

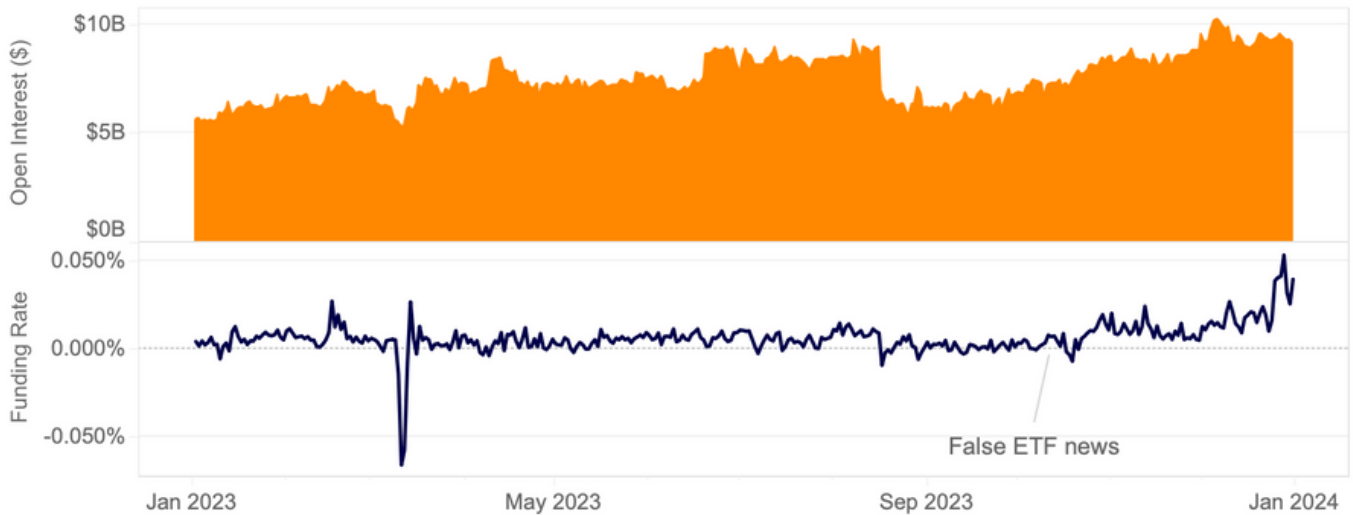
## SOL Cumulative Volume Delta



SOL reached its 2023 high on Christmas, after days of aggressive buying on the largest exchanges. U.S. exchanges Coinbase and Kraken led the way, with Coinbase registering a net of 1mn SOL market bought over five days; Kraken registered 800k. Meanwhile, Binance topped 500k SOL. Despite SOL's unclear regulatory status in the U.S., on-shore exchanges have led the buying pressure that helped SOL soar.

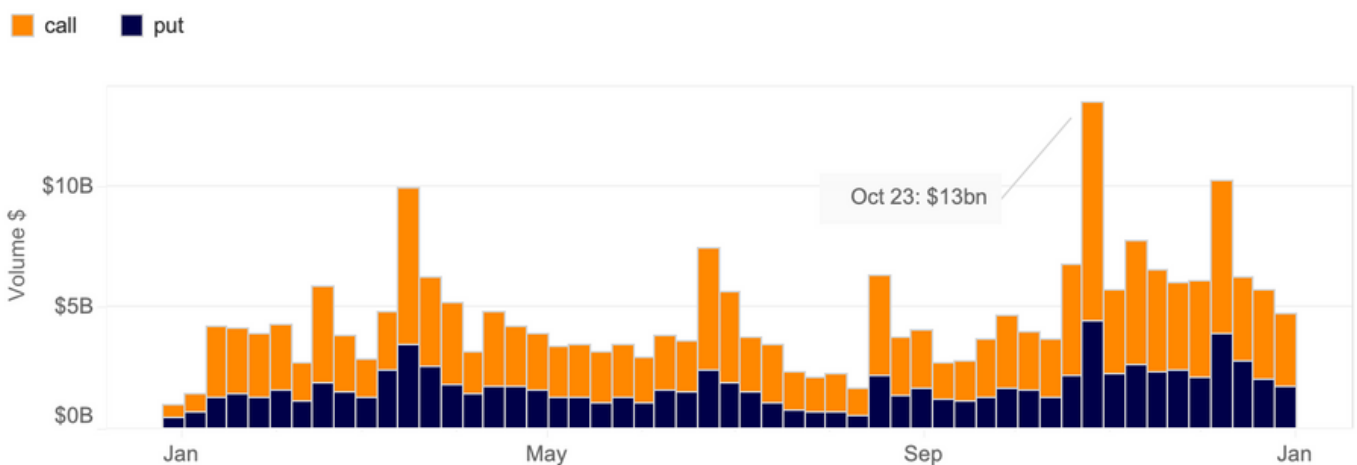
# Derivative Markets Take Off

## BTC Perpetual Futures Open Interest and Funding Rate



As BTC’s price rose at the fastest pace in years, open interest surged even amidst a wave of liquidation events. BTC open interest hit its highest level since March 2022 of more than \$10bn in December. Funding rates have been resolutely positive since mid-October suggesting bullish bias. It should also be noted that perpetual futures trade volume remained relatively lackluster, suggesting the increase in the amount of open contracts is due to hedging and longer-term positioning rather than speculative interest.

## BTC Options Weekly Trade Volume

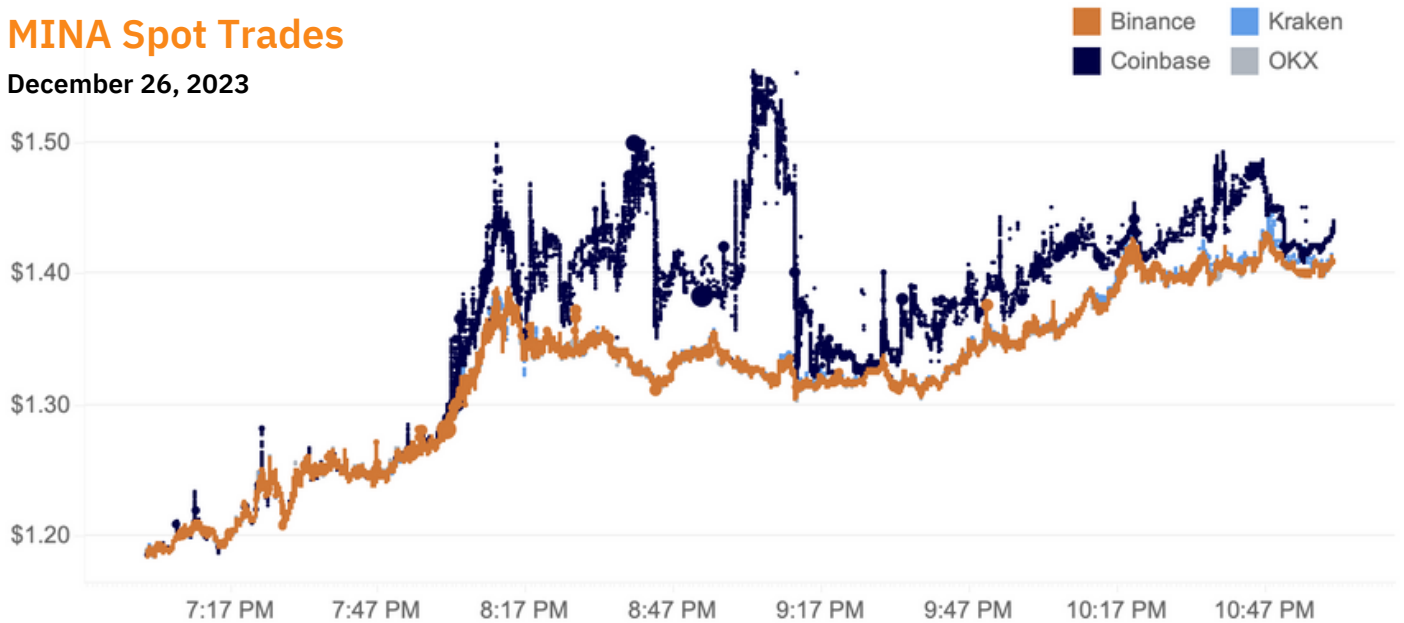


Bitcoin option volume also surged to an all-time high of \$13bn in October, as traders bet on higher volatility ahead. While BTC option markets remain multiple times smaller than perpetual futures, they have shown significant growth this year, with average weekly volume rising from \$3bn in 2022 to \$5bn in 2023.

# The Coinbase Premium Resurfaces

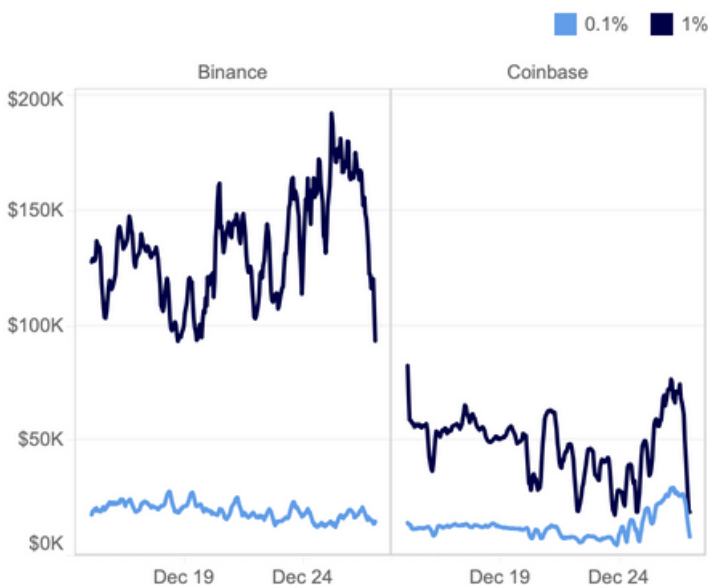
## MINA Spot Trades

December 26, 2023



Liquidity has not kept pace with price increases and surging volumes. One of the clearest representations of this trend came on December 26, when the price of multiple tokens began decoupling across exchanges. MINA, the native token of the Mina Protocol, quickly gained attention as one of the few tokens allowing users to speculate on zero-knowledge proofs ahead of anticipated airdrops by ZK-powered Ethereum Layer 2 networks. In just one week, its price had doubled, from under 70 cents to nearly \$1.50. As price approached \$1.30 on December 26, Binance and Coinbase began to decouple, with Coinbase quickly surging past Binance. The initial split held for an hour, reaching a peak of over 20 cents before being temporarily closed, then persisting for the next few hours. A similar pattern occurred with STX later that night.

## MINA Ask-Side Market Depth

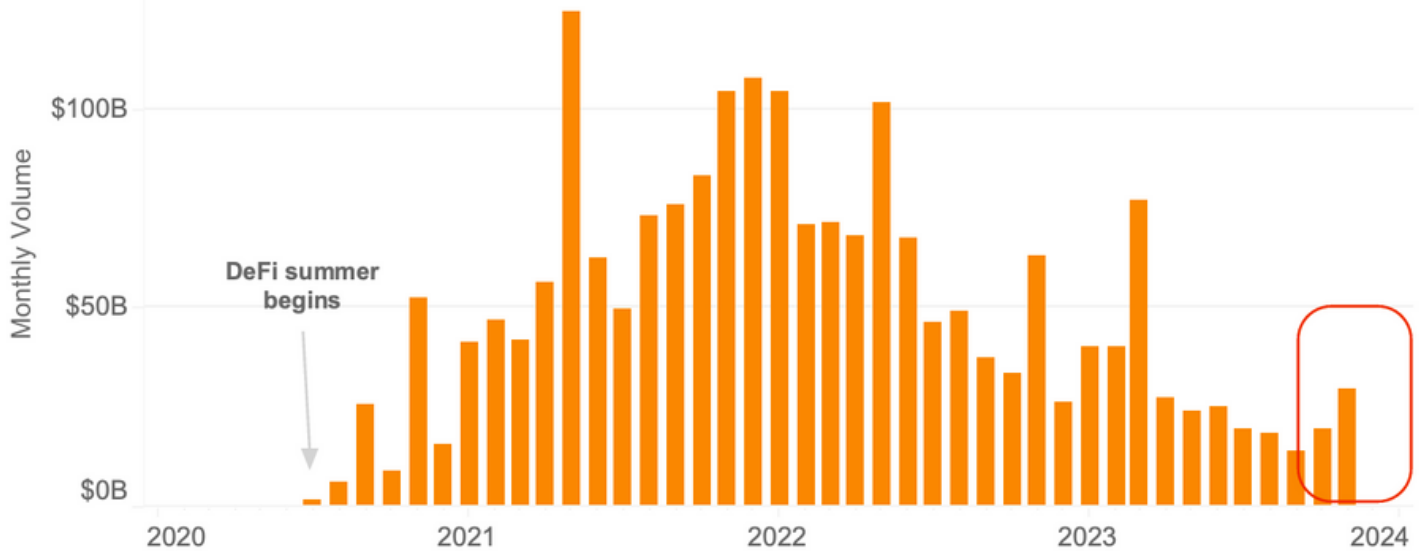


As was the case with virtually all altcoins this quarter, MINA’s market depth did not scale with its rapid price and volume surges. MINA’s ask depth within 0.1% of the mid-price was just \$14k on Binance and \$12k on Coinbase. Rising ask depth on Coinbase was not enough to meet the demand of aggressive market buyers, who quickly broke through the limit sell orders on December 26, creating the break in price across exchanges that took hours to resolve.



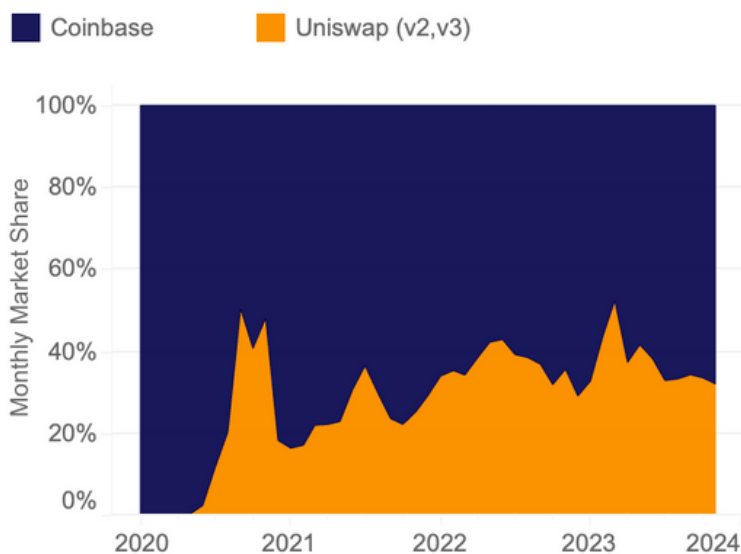
# DEX Activity Picks Up

## DEX Trade Volume



We've experienced an exhilarating turnaround in crypto markets over the past month, but has this overflowed to DeFi? The quick answer is: sort of. DEX volume has always been significantly lower than CEXs, but the recent rally has caused an uptick in activity, albeit at a slightly slower pace across the most liquid platforms including Uniswap and Curve on Ethereum and Pancakeswap on BNB Chain. DEX monthly trade volume rose to \$29bn in November, recovering from a multi-year low hit in September. This is still far below all time highs of more than \$124bn reached in May 2021.

## Uniswap vs. Coinbase

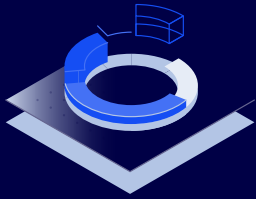


Although the largest DEX, Uniswap, saw its market share retreat relative to Coinbase, it still remains fairly significant at 40%. The market share of overall DEX to CEX trade volume has decreased over the past year, closing November at just 3%, down from 5% in January. All time highs of 10% were hit in November 2020, during peak DeFi enthusiasm. This suggests DEXs were more impacted by the low market participation we observed since the FTX collapse.



Subscribe to Kaiko's research newsletters to stay up to date on the latest market trends.

### Data Debrief



Your weekly data-driven crypto market overview.

*Sent every Monday morning.*

### Deep Dive



In-depth analysis of the crypto trends that matter.

*Sent every Thursday morning.*

**Subscribe**

**Interested in custom research or data?**

Learn more at [www.kaiko.com](http://www.kaiko.com)

*Kaiko's research newsletter is written by the Kaiko research team: Clara Medalie, Dessislava Aubert, and Riyad Carey. This content is the property of Kaiko, its affiliates and licensors. Any use, reproduction or distribution is permitted only if ownership and source are expressly attributed to Kaiko. This content is for informational purposes only, does not constitute investment advice, and is not intended as an offer or solicitation for the purchase or sale of any financial instrument. For any questions, please email [research@kaiko.com](mailto:research@kaiko.com).*