Q1 2023

Kaiko Research

Quarterly Market Report

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

Kaiko

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Q1 Timeline

January

January 6
Huobi lays off 20% of staff and USDD depegs

January 20
Gensis crypto lending business files for bankruptcy

January 25
dYdX delays large token unlock

January 31
Court finds Celsius misled investors and engaged in Ponzi-like behavior

February

February 6
Binance suspends USD payments temporarily

February 13
Paxos announces it will no longer issue new BUSD

February 14
NFT marketplace Blur airdrops token

February 22
Arbitrum's daily transactions surpasses Ethereum's

February 23
Coinbase announces its own Layer 2, Base

March

March 1
Silvergate delays filing. a few days after, SEN network is shut down

March 11
Binance USDC Depegs due to cash held at SVB

March 12
Silvergate closed and SVB deposits backstopped

March 22
Binance reinstates BTC trading fees; Arbitrum airdrops token

March 27
Binance sued by CFTC

Table of Contents

Analyst Commentary

Clara Medalie
@Clara_Medalie

The Future of Fiat Payment Rails

To buy bitcoin, you at some point need to interact with the traditional banking system. This is the paradox of crypto: for the industry to grow, you must have fiat on-ramps.

For years, crypto firms struggled to form banking relationships which made it difficult for the average investor to conduct a simple fiat for crypto transaction. Then came Silvergate and Signature. These two banks found a powerful niche, catering their services for a wave of crypto firms built on the back of the 2021 bull market. They each had their own 24/7 USD payment network that connected hundreds of market markers, institutional investors, and exchanges, which effectively supercharged liquidity in the crypto ecosystem.

Their collapse in mid-March was thus a devastating blow, jeopardizing the future of all fiat payment rails. However, with crisis comes opportunity, specifically for APAC and Europe, which are each offering far more regulatory clarity than their U.S. counterparts. While the USD dominates fiat-crypto activity today, I foresee a future industry less reliant on dollars, and shifting towards the east.

Dessislava Aubert
@DessislavaIane2

The Power of Macro Data

Crypto markets have shown impressive resilience in the face of banking turmoil and regulatory uncertainty, indicating strong buying support. Bitcoin emerged as the top-performing asset in the quarter, far outperforming equities in risk-adjusted terms. Interestingly, while BTC's correlation with the S&P 500 dropped to its lowest level since November 2021, around the time the Fed took a hawkish shift, its correlation with gold shot up to a multi-year high.

While this could mean that bitcoin's appeal as a store of value is growing, it is clear that technical factors such as low liquidity and sellers' exhaustion are also driving the rally, with most large macro players having already de-risked over the past year.

The March BTC rally in particular highlighted the significant impact of U.S. monetary policy expectations. Despite concerns about financial stability, central banks remain laser-focused on lowering price pressures and are unlikely to cut rates as much as the markets anticipate. This puts the spotlight on macro data in the coming months. Investors will need to keep a close eye on macro to navigate the ever-changing crypto landscape.

Analyst Commentary

Riyad Carey
@riyad_carey

Are These Problems Unsolvable?

It was a bad quarter for stablecoins. It began with regulatory actions that set an expiration date for BUSD, which was followed by Circle's funds becoming temporarily inaccessible, jeopardizing the reserves of their USDC stablecoin. Not only did this cause USDC to depeg, but so to did DeFi-native stablecoins like DAI and FRAX, which rely heavily upon USDC. That weekend, it felt like DeFi was collapsing; just a week later, most everyone had moved on.

Exploit-wise, it was actually a relatively tame quarter. I say "relatively" because this still included a $200mn exploit of Euler Finance and $120mn exploit of BonqDAO, both lending and borrowing protocols. All the usual suspects were present in the exploits: flash loans, smart contract vulnerabilities, and price manipulation.

To answer the question posed in the title: no. Creating a decentralized and stable stablecoin isn't impossible. Lending and borrowing protocols don't have to be victims of exploits. But the only way these problems can be solved is with focus on the very-hard-to-solve but not impossible problems that continue to plague this industry.

Conor Ryder, CFA
@ConorRyder

Too Early for a Bitcoin Victory Lap

If there was a bitcoin marketing team, the last month would be as good as it gets for them.

Confidence in banks in the U.S. and Europe has been decimated and people are scrambling for an alternative to protect their dollars. Enter Bitcoin, an asset that was created for entirely this purpose – a decentralized form of money that can't be controlled by any entity.

At first glance, the recent banking crisis seems like the perfect catalyst for a BTC price rally. However, digging a bit deeper into the reasons for the move points us in the direction of liquidity, and more specifically, lack thereof.

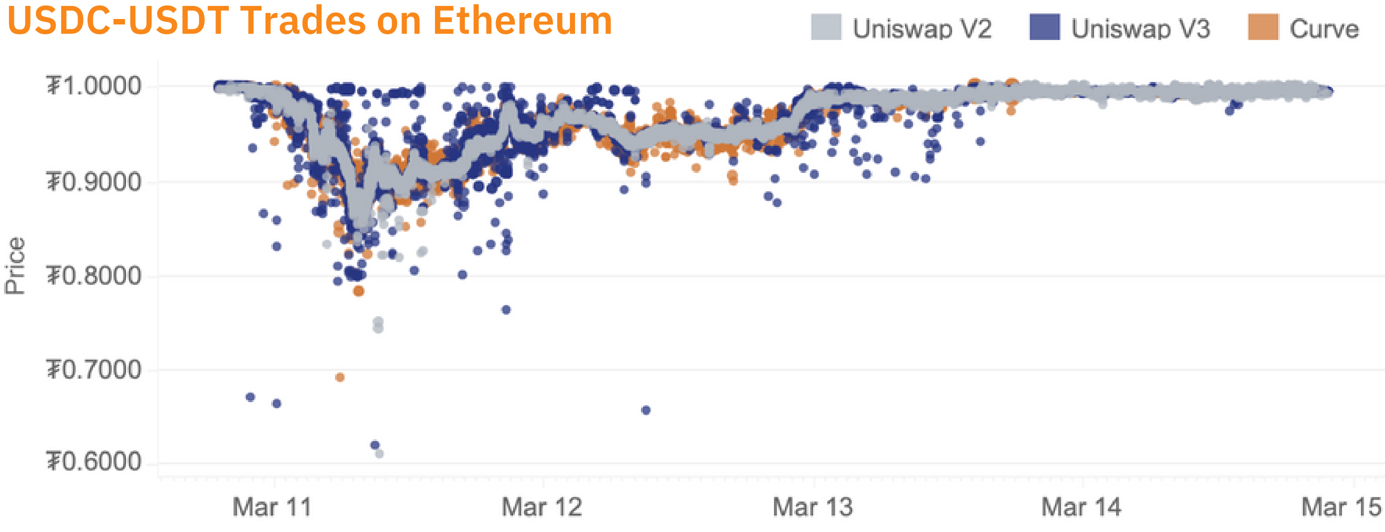
When liquidity is low in any financial market, volatility is high in both directions. Prices have less support on both the downside and the upside. This month, BTC market depth reached 10-month lows, offering little resistance to the upside as the price rallied.

The lack of support to the upside also applies to the downside, meaning we need to be just as cautious of an outsized move downwards in the coming weeks. It's too early for a Bitcoin victory lap.

Banking Crisis Impacts Crypto

USDC Depegs During SVB Collapse

USDC-USDT Trades on Ethereum

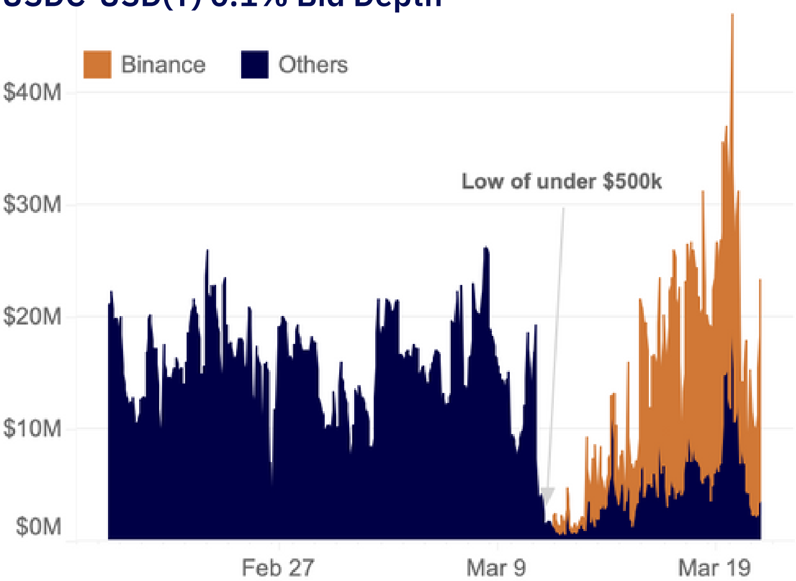


Source: Kaiko Tick Trade Data

The biggest market impact of the March banking crisis involved USDC, a systematically important stablecoin to the DeFi ecosystem. USDC became ensnared in banking troubles when it was revealed that Circle held $3.3bn of its reserves at Silicon Valley Bank. Circle then suspended redemptions, which created a glut of USDC supply that instead was swapped through illiquid CEX pairs and more liquid DEX pools, namely Uniswap V3 and Curve's 3pool. Thus, USDC depegged, dipping into the $0.80 range on both CEXs and DEXs. This volatility created a flurry of on-chain activity, with bots arbitraging across the 3pool and many Uniswap V3 pools. Ultimately, Curve facilitated $6bn in swap volume, surpassing all other USDC markets.

Binance Adds Much-Needed Liquidity

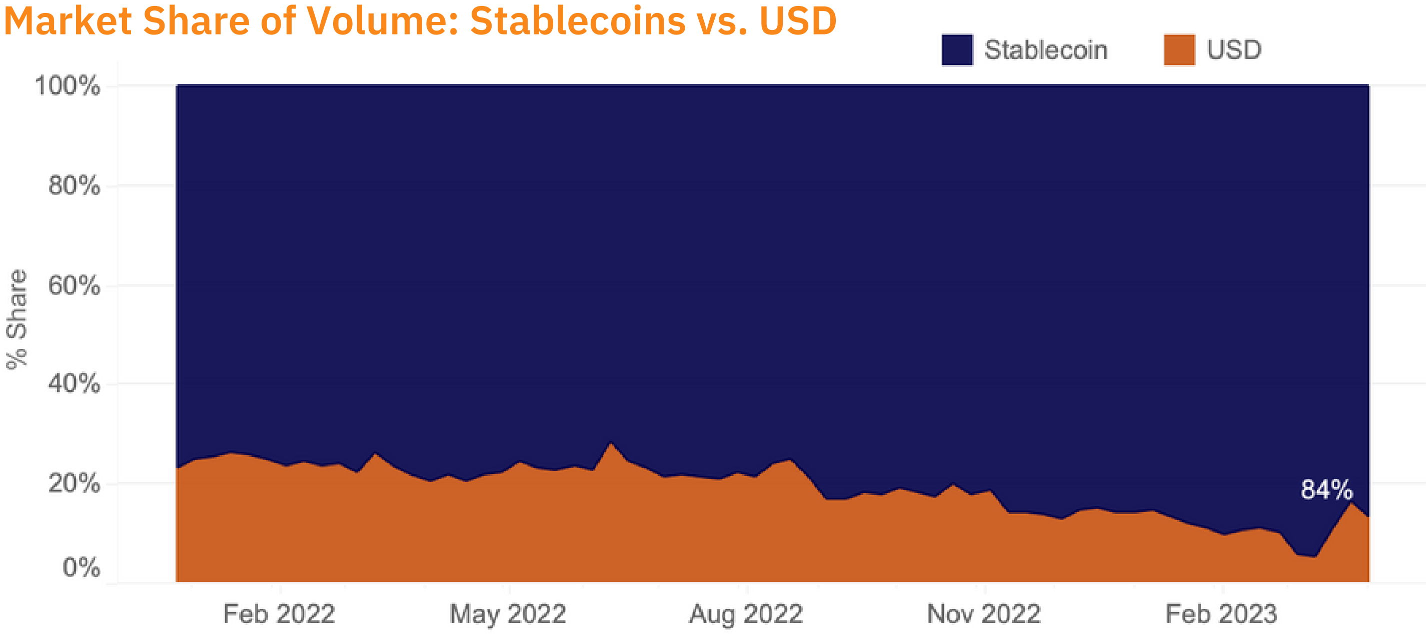
USDC-USD(T) 0.1% Bid Depth



USDC was quite illiquid on CEXs relative to its market cap, which was exerbated by Binance's decision to de-list USDC last September. Thus, when news broke and redemptions paused there were few centralized outlets for unwanted USDC. During the depeg, bids within 0.1% of the mid-price hit a low of under $500k. However, Binance relisted its USDC-USDT pair, which quickly became an important source of liquidity.

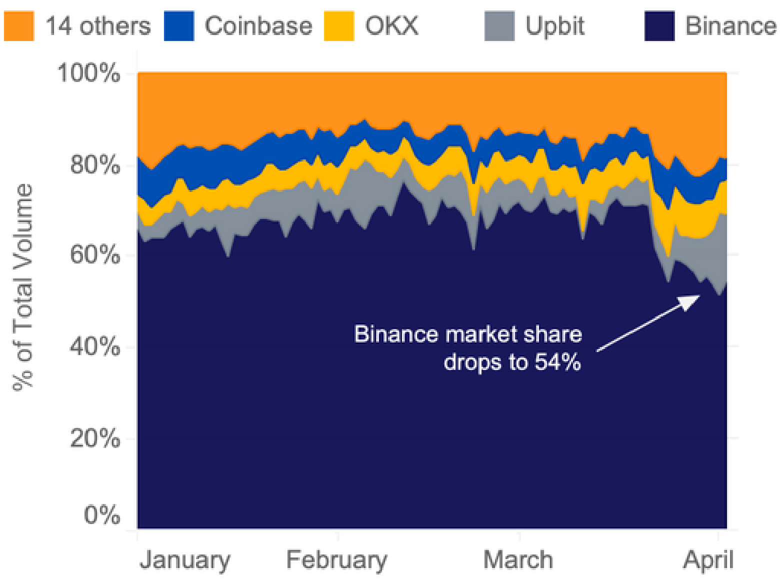
Stablecoins Become Increasingly Dominant

Market Share of Volume: Stablecoins vs. USD



The crypto industry has become significantly less reliant on fiat currencies over the past few years. In fact, the percentage market share of all volumes on centralized exchanges for stablecoins just hit an all-time high following the Silvergate troubles this quarter, as investors continued to prefer stablecoins to USD. The data shows that USD is being phased out on exchanges and the closure of USD payment rails, triggered by the banking crisis, may only accentuate the trend. However, Binance reinstated BTC-USDT and BTC-BUSD trading fees at the end of March, which caused stablecoin volume share to fall back to 84%.

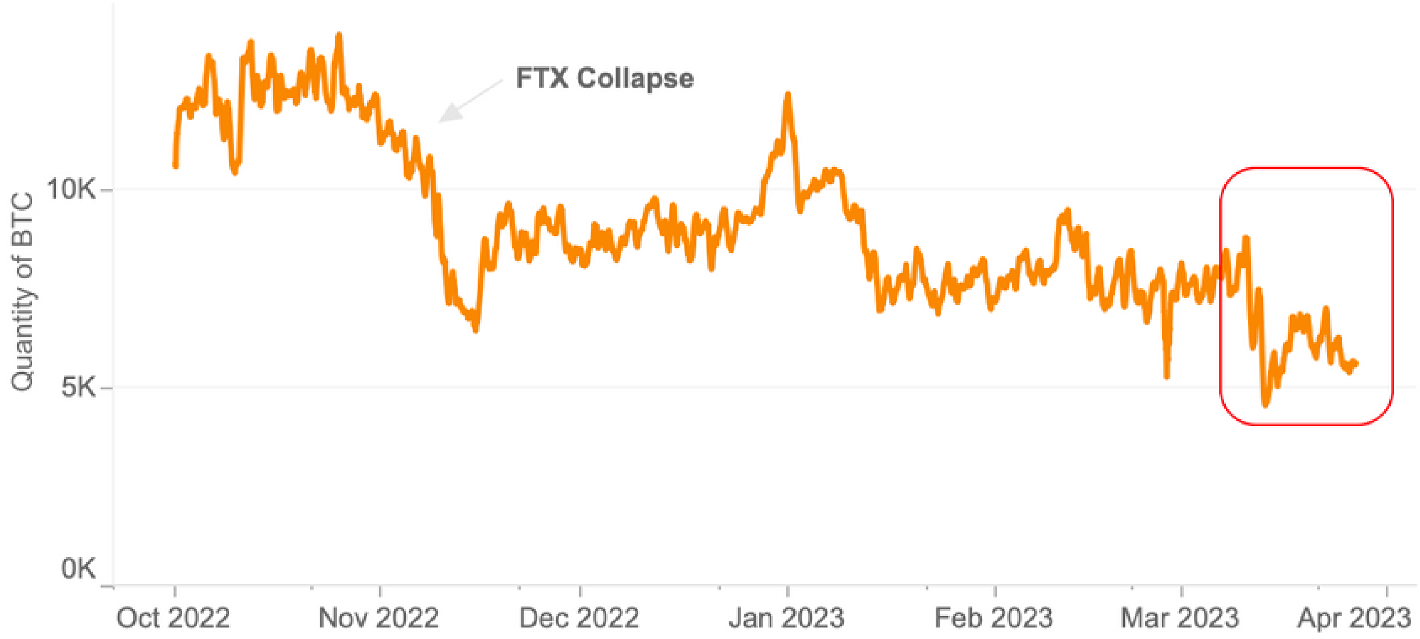
CEX Market Share



The banking crisis emerged in tanem with an ongoing regulatory crackdown, which together have upended crypto market structure, leaving an uncertain dynamic among the world's largest exchanges. In the last two weeks of Q1, Binance has lost 16% market share of trade volume following a CFTC lawsuit and the decision to end its zero-fee trading program. The exchange remains the largest in the world with 54% dominance.

Crypto Liquidity Suffers After Banking Collapses

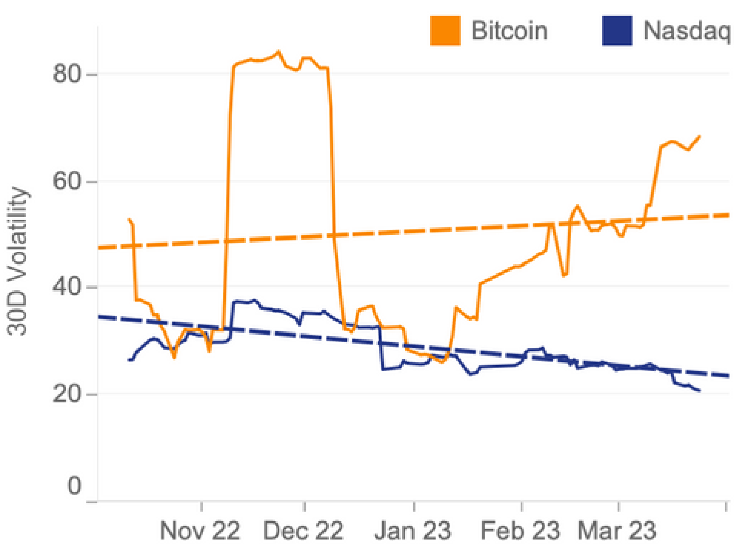
BTC 2% Market Depth



When liquidity is low, volatility is elevated as prices have less support to both the downside and the upside. Using 2% market depth in BTC as a metric for market liquidity, we are currently at our lowest levels in 10 months, even lower than the aftermath of FTX.

When FTX and Alameda collapsed, we first identified the drop in liquidity as the "Alameda Gap", highlighting the absence of one of the industry's largest market makers. That gap has yet to be filled, and with the banking issues of late, liquidity has taken another hit.

Volatility Rises Due to Low Liquidity

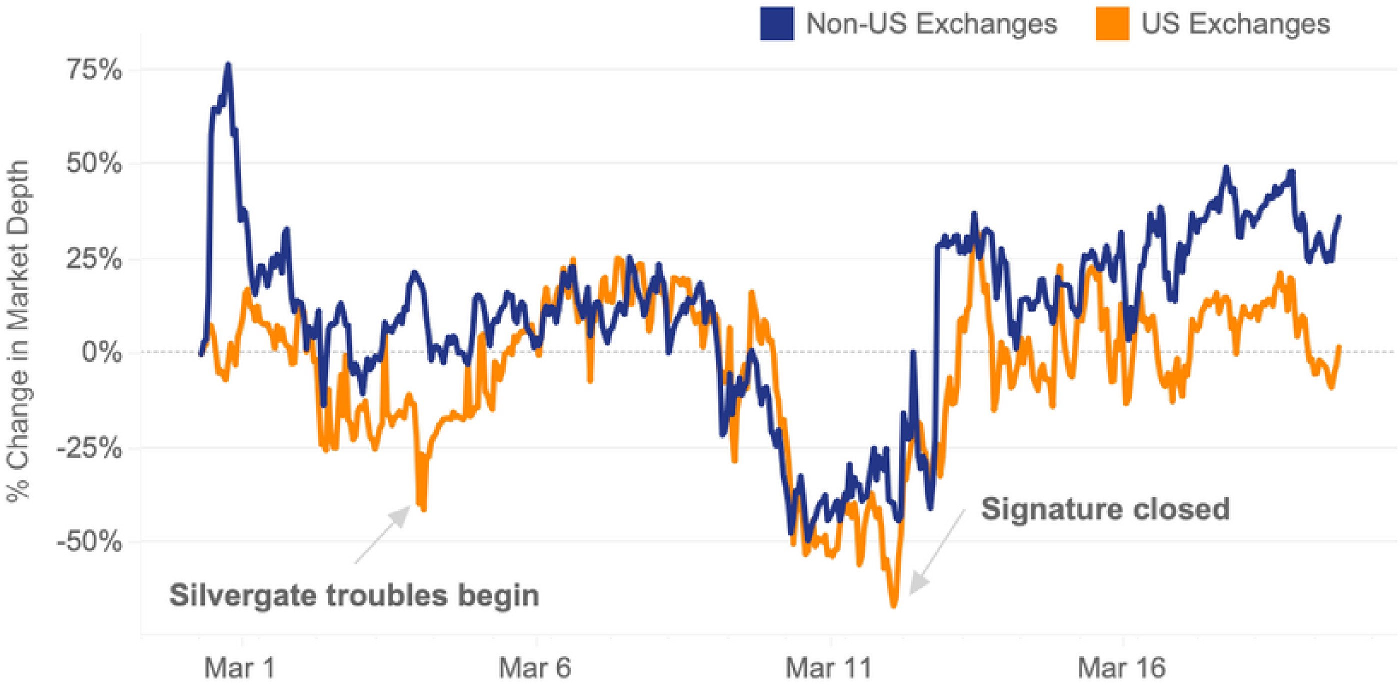


The drop in liquidity has resulted in a sharp increase in volatility for BTC. Q2's BTC rally was impressive, but observations of a mass rotation into BTC may be premature as it seems a large portion of the rally can be attributed to low liquidity. Low liquidity means that prices can fall just as quickly as they rise, so investors can likely expect more volatility in the near term.

U.S. Liquidity Hit Hardest

U.S. vs Non. U.S. Exchange Liquidity

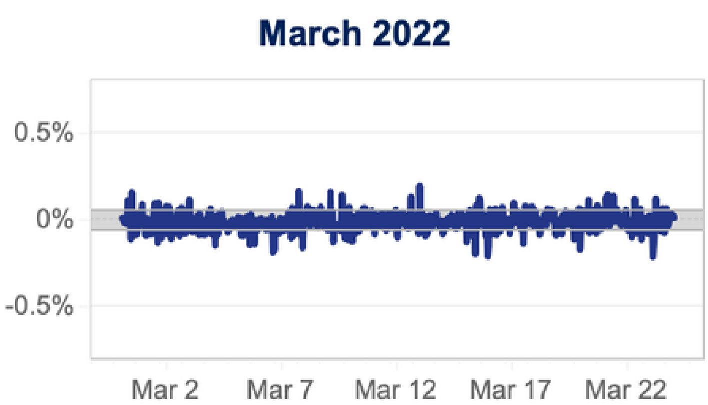
% Change in Market Depth

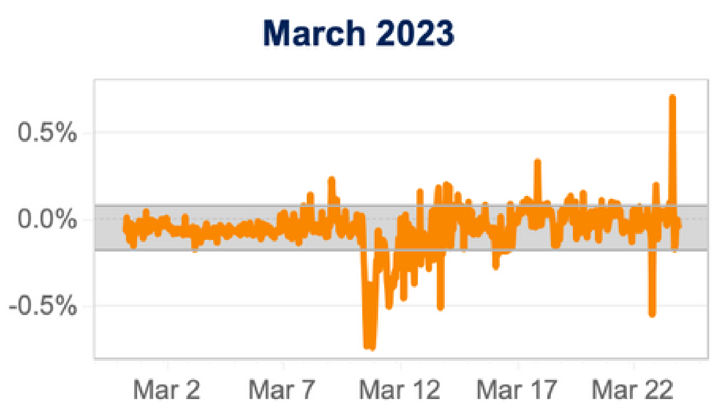


The closure of SEN and wind-down of Signet — some of the only USD payment rails for crypto — resulted in U.S exchanges being harder hit from a liquidity standpoint as market makers in the region face unprecedented challenges to their operations. We can see the difference in reaction between U.S. and non-U.S. exchanges, with U.S. exchanges registering a larger drop in liquidity. The good news is that USD liquidity in the U.S seems to have recovered to early-March levels, although the loss of easy fiat on-ramps could have a more long term impact.

The loss of those on-ramps is also impacting the homogeneity of prices between exchanges as market makers become operationally less efficient and more opportunities for arbitrage arise. Binance.US in particular is showing larger price differences relative to other exchanges in 2023.

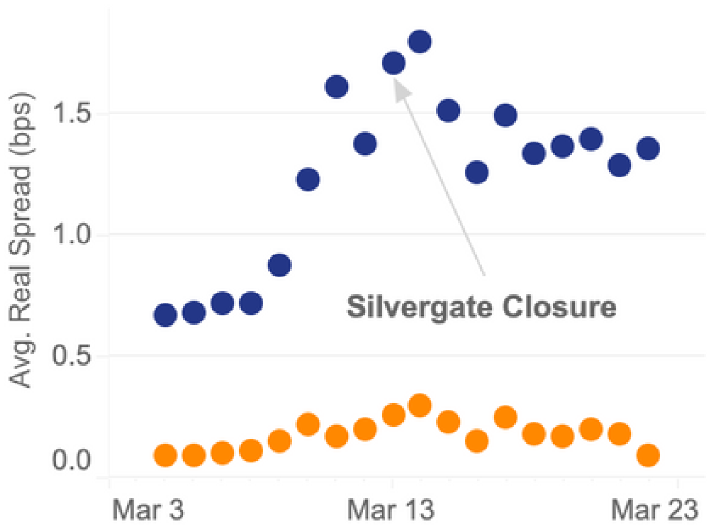
Binance.US Price Difference vs. Average on 10 Other Exchanges





Average Bid-Ask Spread

USD vs. USDT Pairs



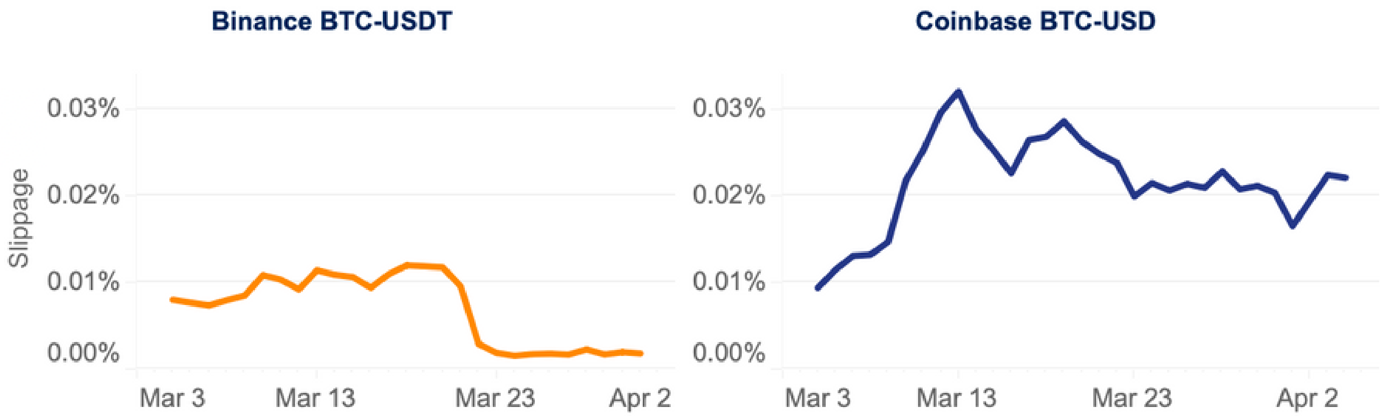
Averaged across 5 exchanges

Another way to measure liquidity in markets is the spread: the difference between the best bid and the best ask. Average USD spreads were more volatile than USDT spreads as banking issues worsened, spiking from 2bps all the way to 4bps as Silvergate was shut down.

Slippage for the BTC-USD pair on Coinbase is two times higher than it was at the start of the month as USD liquidity suffers across the board in crypto markets. On Binance, slippage dropped considerably after the exchange eliminated most zero-fee trading.

Slippage Doubles on USD Pairs

Simulated $100k market sell order



Lack of liquidity means no rally can be trusted.

USD pairs are still being phased out by investors in favor of stablecoins. This makes the lack of USD payment rails more of an institutional problem than an investor issue, but the knock-on effects of reduced liquidity (which we have seen in depth, spreads, and slippage) will have an impact on everyone in the space. USD payment rails once again becoming fully operational would create a boost in liquidity as market makers would be better able to do their jobs. A boost in liquidity will also mean less volatility and a more attractive asset class.

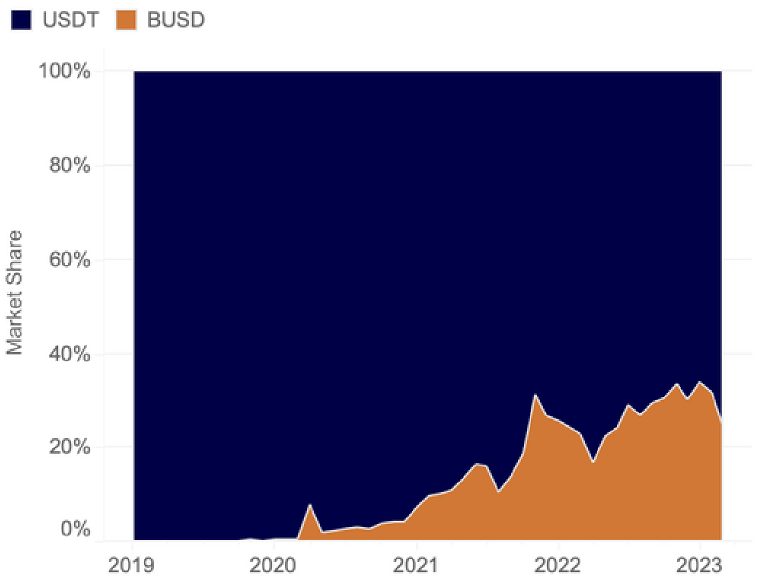
Binance's Tumultuous Quarter

Paxos Forced to Halt BUSD Issuance

BUSD Temporarily Depegs

Binance's tumultuous quarter began with a regulatory action from the NY Department of Financial Services (NY DFS). NY DFS stated that Paxos, which issued BUSD, had violated its obligation to conduct risk assessments of customers to prevent bad actors from using the platform. Paxos announced it would halt issuing BUSD, which instantly caused market volatility and a temporary depeg for BUSD. Redemptions will officially be halted sometime in early 2024, but the stablecoin is still trading and has not depegged since.

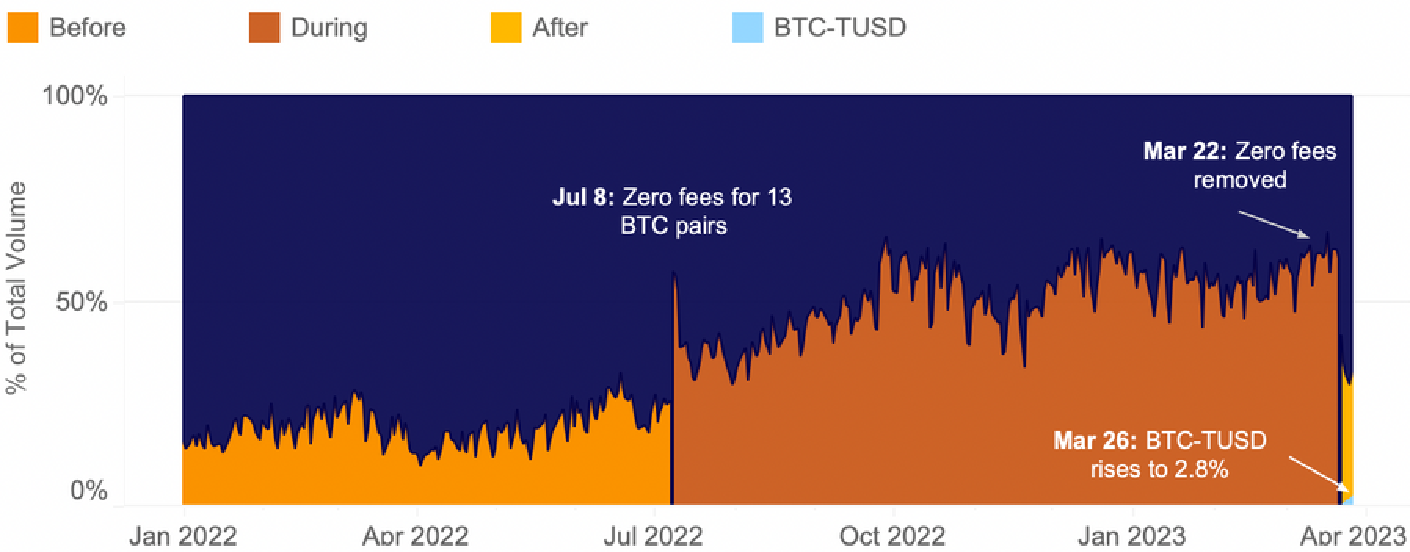
Stablecoin-Denominated Altcoin Volume



Since 2020, Binance had promoted BUSD as its trading stablecoin of choice as it stood to profit from its increased market cap. USDT has long been the dominant stablecoin on CEXs, but BUSD briefly gave it a run for its money. For the top five altcoins, BUSD surged from nothing to account for 35% of their volume on Binance, peaking in January 2023. Since the regulatory action BUSD's share has dropped, hitting just 25% in March.

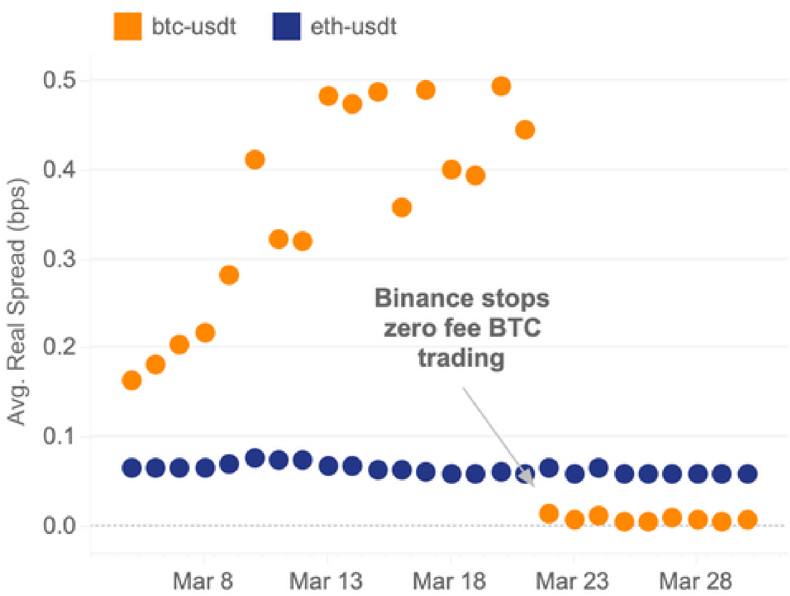
Binance Ends Zero-Fee Trading

Zero-Fee Trading Pair Market Share



On March 22, Binance halted its no-fee trading promotion for 13 BTC spot trading pairs — including BTC-USDT and BTC-BUSD — reversing a move that helped boost the exchange's market share by more than 20%. As of mid-March 2023, zero-fee trade volume accounted for a majority of Binance's total volume, clocking a high of 66%. Before July 8, 2022, the day zero fees launched, market share of volume for the 13 BTC pairs was just 25%. In the five days after fees were reinstated, market share of these 13 pairs halved to < 30%.

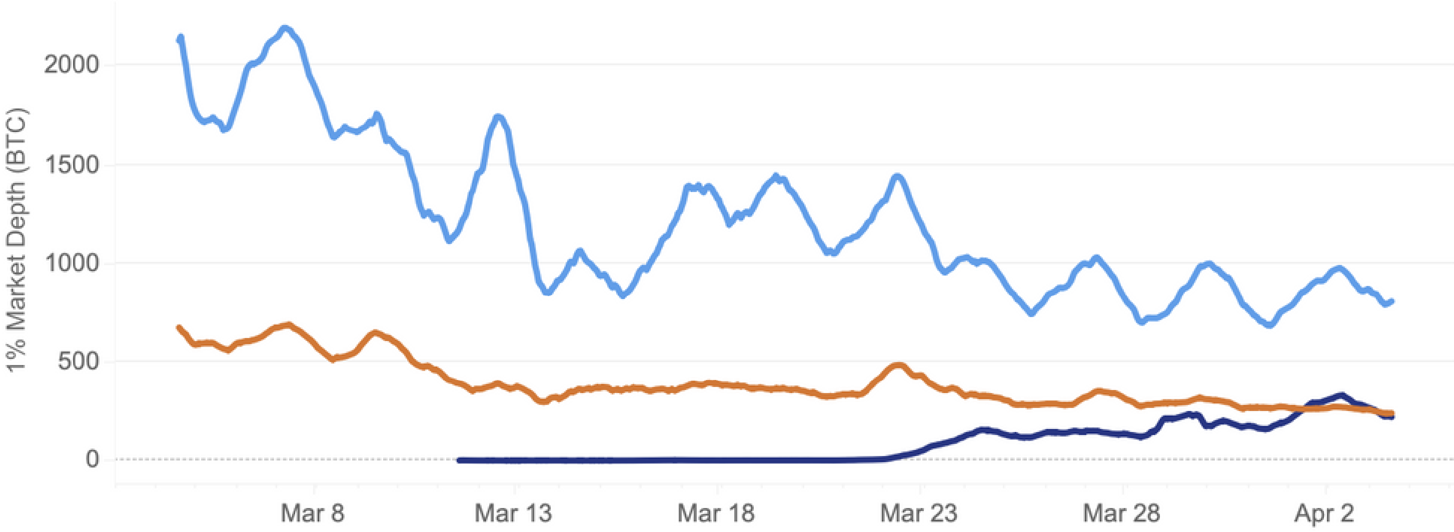
BTC Spreads Adjust for Fees



The reinstatement of fees brought an immediate adjustment in spreads. Market makers had originally widened spreads because zero-fee BTC trade volume was not counted towards VIP fee tiers. BTC spreads are once again lower than spreads for ETH. Tighter spreads make it less profitable for market makers to offer liquidity on that pair, but their volume is now counted in the VIP program. Price takers are no longer encouraged to trade with zero fees, thus trade volume for BTC pairs has plummeted, causing Binance's market share to tumble.

Binance Promotes TUSD Stablecoin

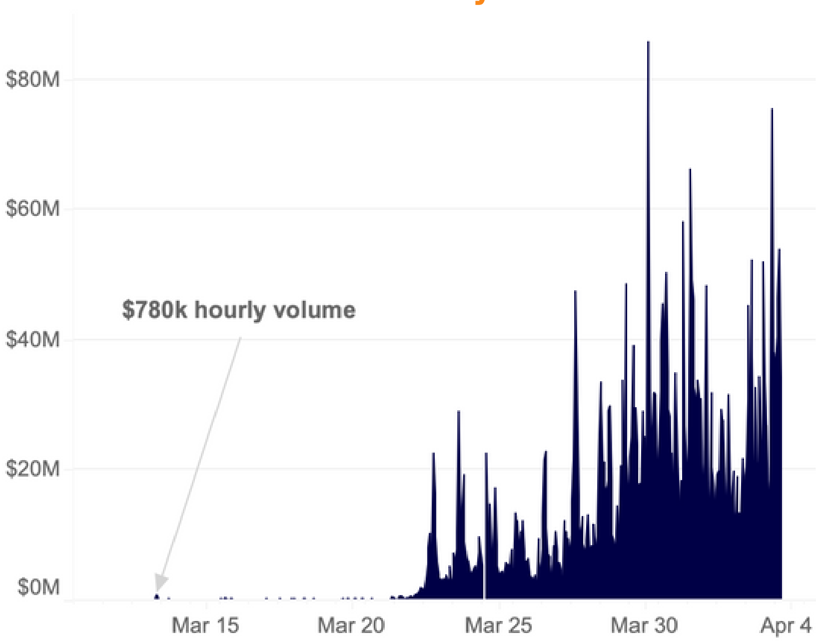
BTC-TUSD Market Depth Surpasses BTC-BUSD



The announcement that Binance would be reinstating fees for 13 BTC pairs was made more surprising by the exchange removing fees for its BTC-TUSD pair. TUSD had previously been delisted from the exchange when Binance announced that it would be auto-converting select stablecoins (also including USDC) into BUSD. Then, in early March, Binance relisted a BTC-TUSD pair that remained extremely illiquid until it made its fee change. Within 1% of the mid-price, the TUSD pair had just 2 BTC worth of liquidity, compared to about 400 BTC on the BUSD pair and between 1,000 and 1,500 on the USDT pair.

Now, just a couple weeks later, BTC-TUSD is slightly more liquid than BTC-BUSD while BTC-USDT is just four times more liquid, as measured by market depth.

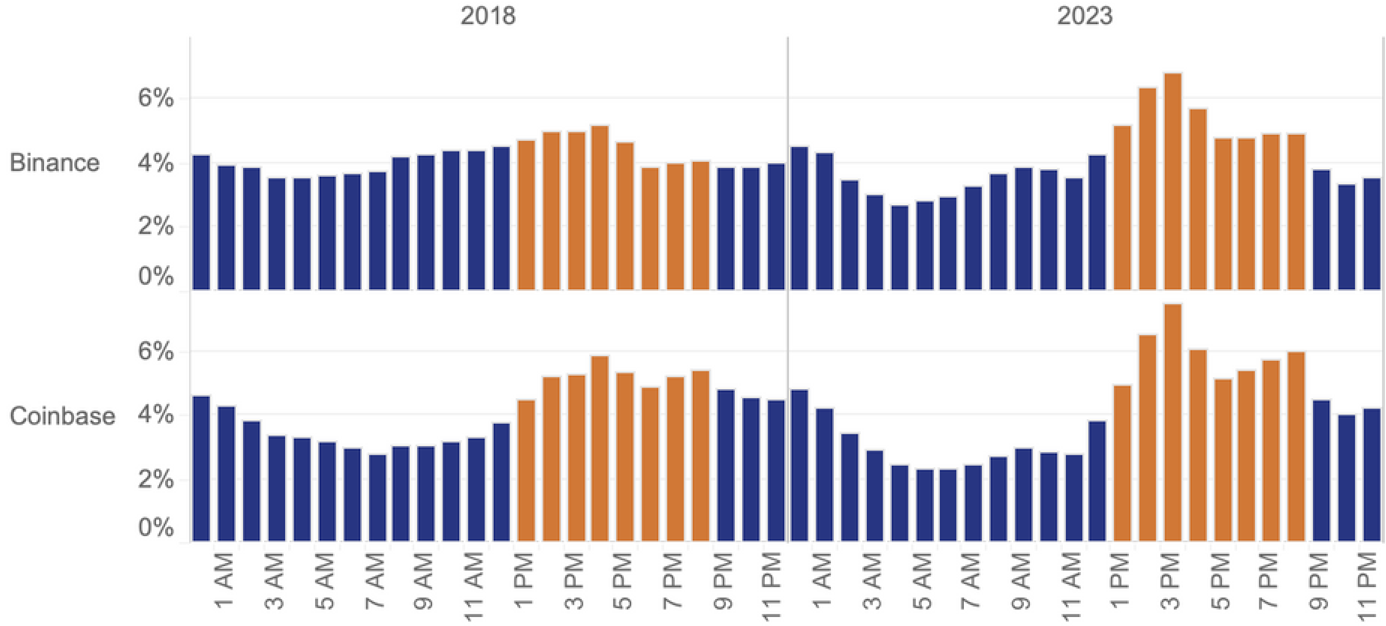
Binance BTC-TUSD Hourly Volume



Post-relisting and pre-fee change, BTC-TUSD on Binance had never exceeded $800k in hourly volume. It has since hit over 100 times that figure and TUSD's market cap has nearly doubled, emphasizing just how important Binance's policy changes can be. It remains unclear why Binance chose to promote TUSD, as it does not have any public ties to the token or its issuer. We can expect TUSD's market share to continue growing, considering Binance remains the largest exchange in the world.

Binance Faces CFTC Lawsuit

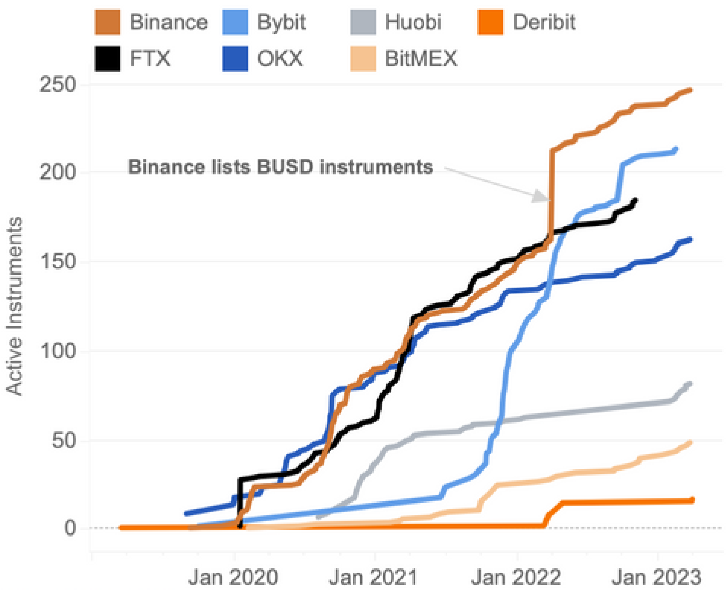
BTC Volume by Hour



Source: Kaiko COHLCV Data; All BTC spot pairs

To close out the quarter, the U.S. Commodity Futures Trading Commission (CFTC) announced that it was suing Binance and its top executives for willfull evasion of federal law and operating an illegal digital asset derivatives exchange. The suit alleged that Binance targeted U.S. customers, more recently focusing on onboarding high-volume traders from Binance.US to Binance (global). Much of Binance's trading volume comes during U.S. hours, up from 32% in 2018 to 43% in 2023, only slightly less than Coinbase's 47%. If U.S. institutions are forced off the exchange it could serve as another hit to its industry-leading volume.

Active Perpetual Futures Instruments



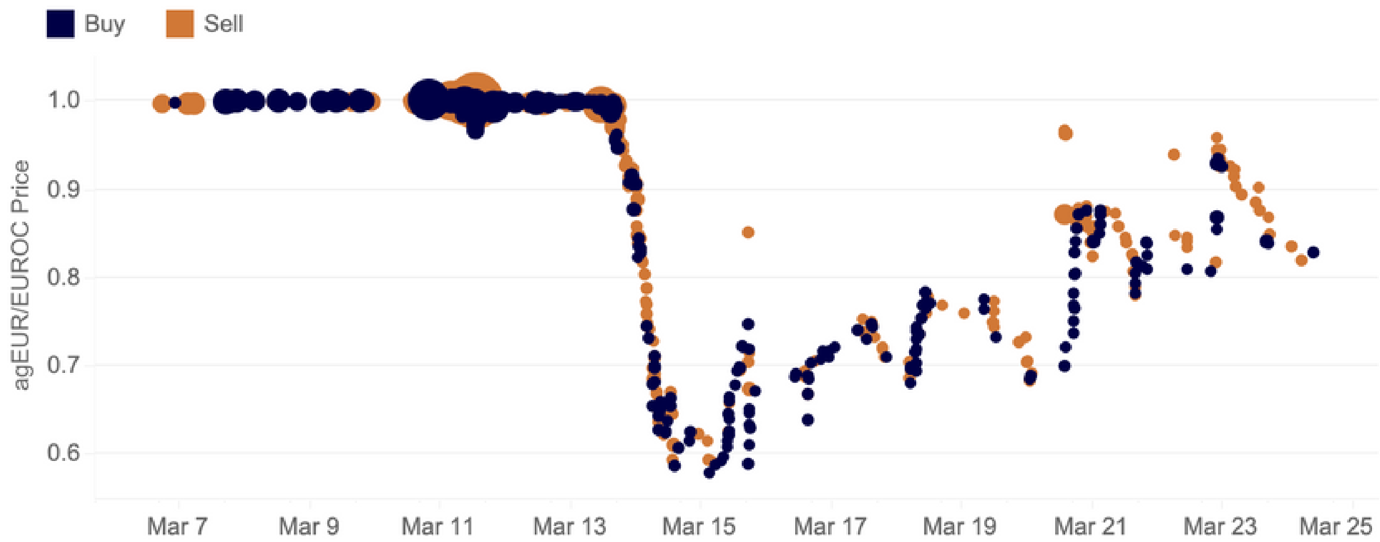
One of the main draws of Binance for U.S. institutions is its availability of perpetual futures instruments. Since it entered the space in 2019, Binance has almost always offered the most contracts, only challenged by FTX. Domestically, U.S. institutions are limited to exchanges like CME which only offer BTC and ETH derivatives. Binance has 250 active perpetual futures instruments, higher than its closest competitors.

BLUR Airdop, Eueler Hack Create Ripple Effects on Ethereum

BLUR's Price and Volume Slump

NFTs received a much-needed spark this quarter as Blur, a new NFT marketplace and aggregator, announced the details of its airdrop and released its token in mid-February. Its airdrop encouraged users to place bids for collections, creating extremely deep liquidity that allowed collectors/traders to sell significant amounts of high-value NFTs with minimal price impact. While Blur has disrupted the NFT market, the price of its token BLUR has fallen since its release and volumes are subdued.

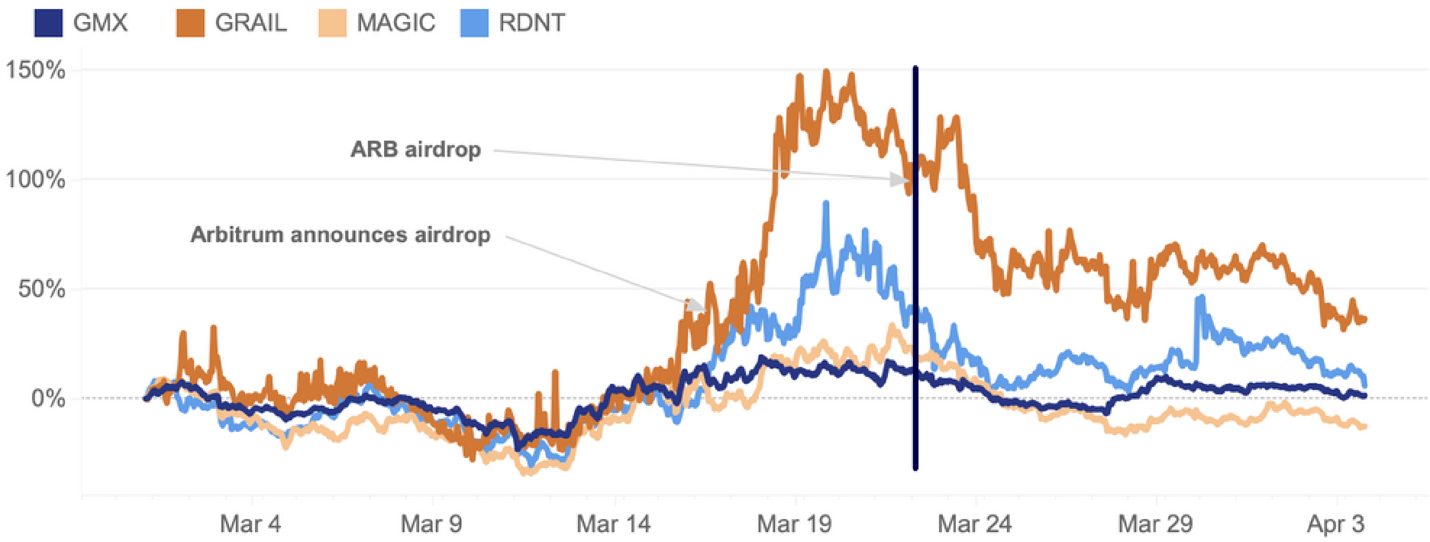
agEUR Remains Depegged on Curve Following Euler Hack



The hack of nearly $200mn from lending and borrowing protocol Euler has had ripple effects across Ethereum DeFi as the risks of "money legos" was exposed. Angle Protocol's euro-based stablecoin agEUR has still not returned to its peg, as roughly half of the protocol's $36mn TVL was held in Euler. While the hacker has since returned most of the stolen funds, agEUR remains about 3% lower than EUROC, the euro stablecoin issued by Circle; their Curve pool also remains unbalanced, with just 6% EUROC.

Arbitrum Airdrop Provides L2 Boost

Native Arbitrum Tokens Surge on News, Fall After Airdrop



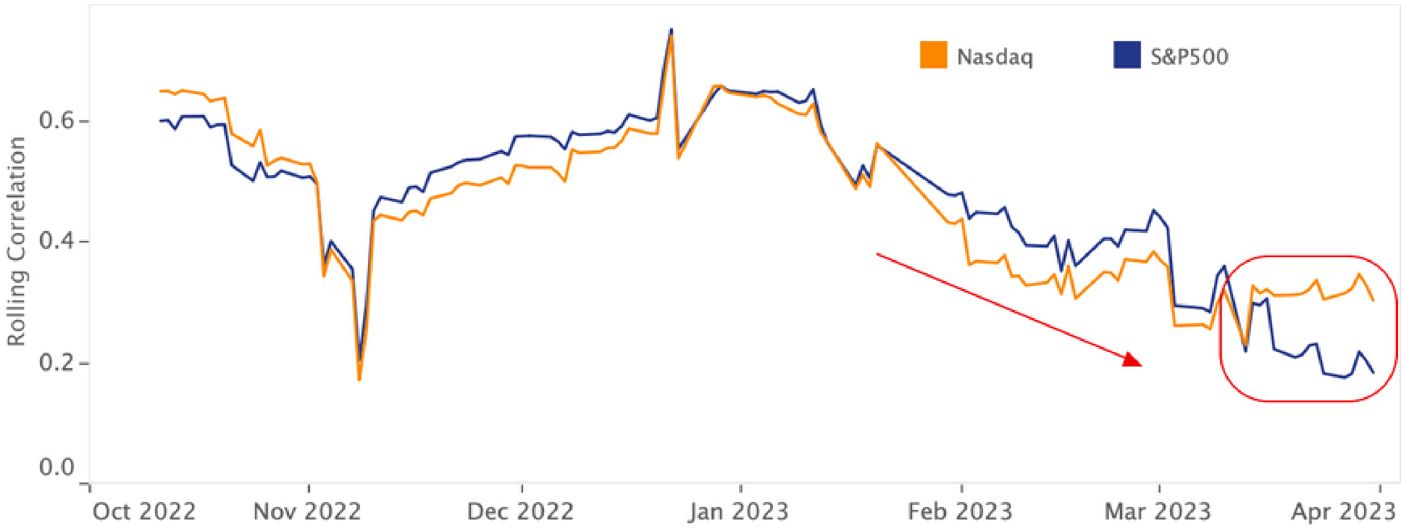
Arbitrum ecosystem tokens with smaller market caps surged following news that the Ethereum layer 2 network would finally be airdropping its ARB token. This airdrop was for users and protocols on the network, with GMX (token: GMX) and Treasure DAO (MAGIC) receiving the highest allocations of 8mn ARB each. Meanwhile, Camelot DEX (GRAIL), a growing Arbitrum-native exchange, received 2.1mn tokens while Radiant Capital (RDNT), a cross-chain lending and borrowing protocol received 3.3mn.

ARB Remains Rangebound Despite Foundation Controversy

ARB fluctuated between $1.10 and $1.50 in Q1, surging in the last three days of the quarter and slumping since. The token became the subject of much controversy as the Arbitrum Foundation proposed a governance vote that would have allocated it 750mn ARB tokens. The vote failed, but token movements revealed that 50mn tokens had already been moved, with 10mn sold for operational expenses. The Foundation stated that the vote was "a ratification and not a request". It will now separate the proposals for future votes.

Macro's Mixed Bag

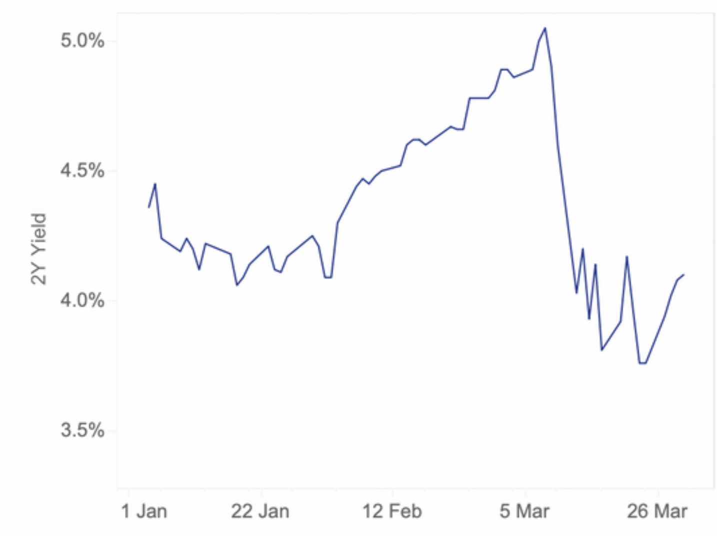
BTC Showing Signs of Decoupling With Equities



Many in the crypto space have longed for the day when crypto decouples from equities. This would be taken as a sign that crypto is living up to its promise, whether BTC as an inflation hedge or crypto broadly as a truly distinct asset class with unique characteristics. For the last couple of years, crypto returns have mirrored equity returns, with correlation only dropping during headline-grabbing crypto collapses in 2022.

However, this quarter brought about a consistent drop in correlation that cannot be tied to specific market events. Correlation between BTC and the S&P 500 has fallen from 0.7 to 0.2 in just three months. BTC's correlation with the Nasdaq also fell but has leveled off since mid-March. Whether this is a temporary phenomon or a new paradigm will become clearer over the next few quarters.

2 Year Treasury Yield Plummets

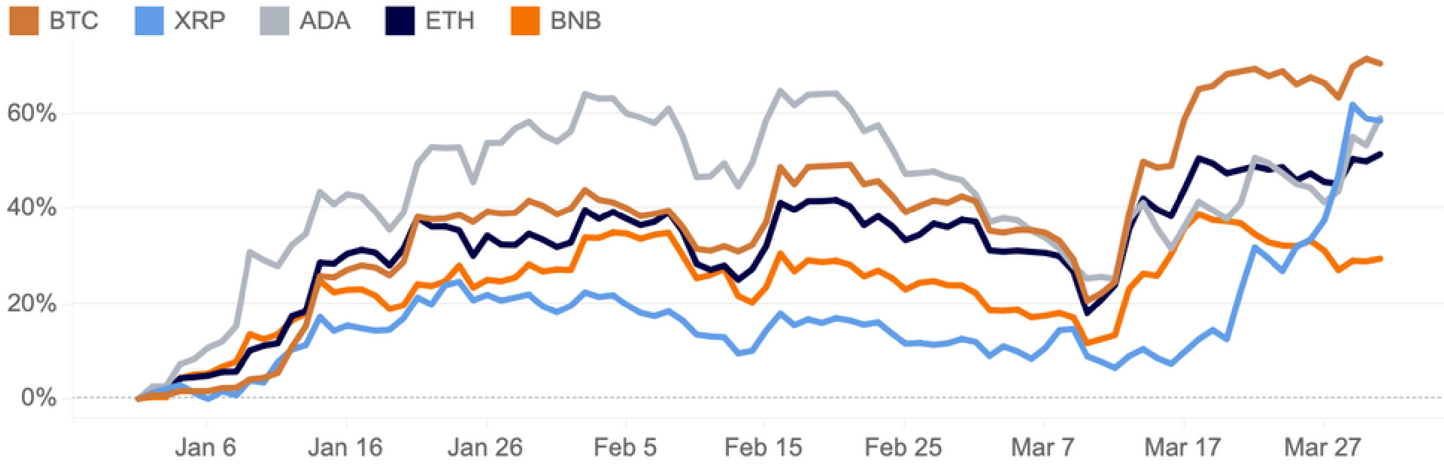


The 2 year treasury yield is one of the best indicators of the market's expectations of the Fed's actions with regards to interest rates. The Fed has more control over the shorter end of the yield curve as they are most sensitive to interest rate changes. The yield on the 2 year fell from 5% down to 3.7% in a matter of days as the market began to price in imminent rate cuts from the Fed, painting a favorable outlook for risk assets.

Q1 Chartbook

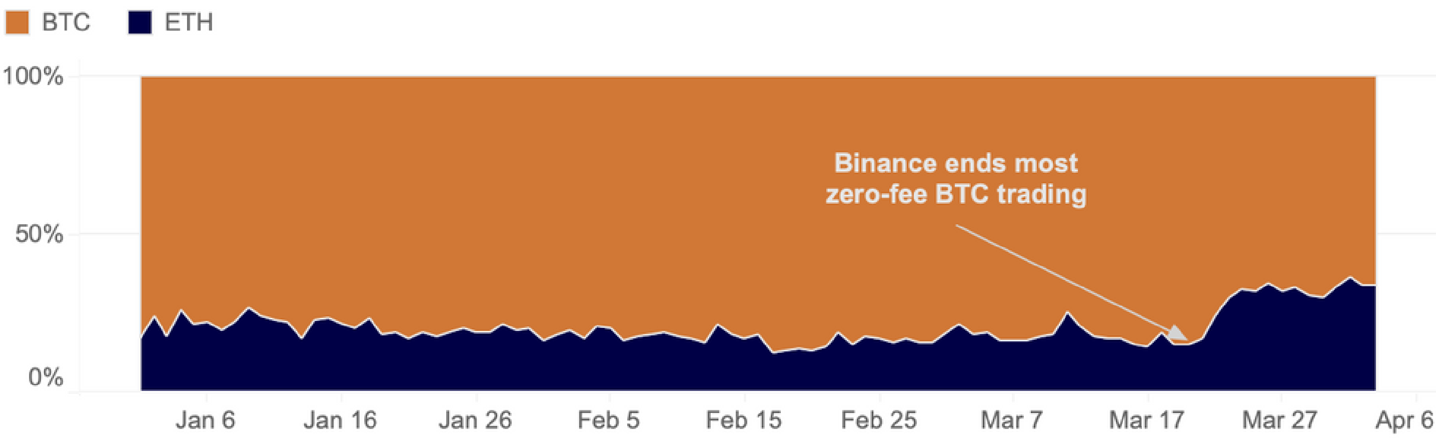
Price & Volumes

Top 5 Returns



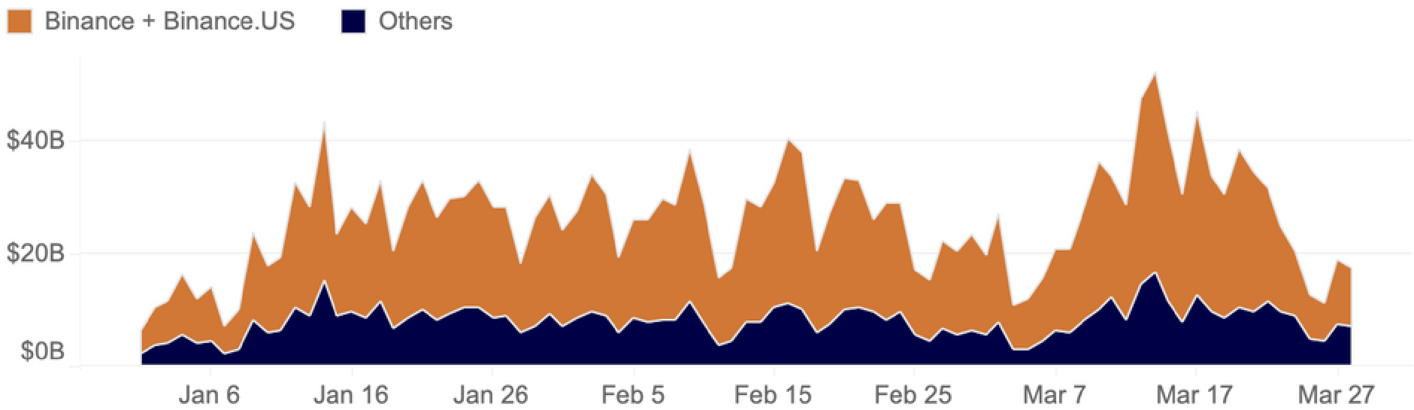
Source: Kaiko Asset Price Data

BTC to ETH Spot Volume Ratio



Source: Kaiko Asset Volume Data

Daily CEX Spot Volume

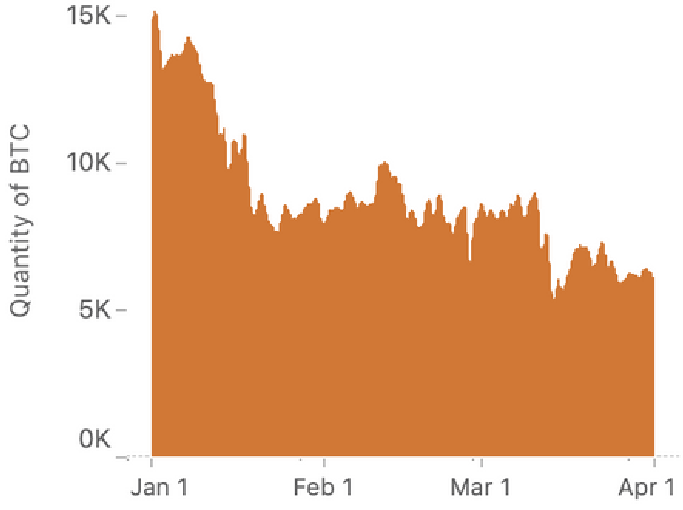


Source: Kaiko Exchange Volume Data; Others includes the top 17 exchanges in Kaiko's Exchange Rankings

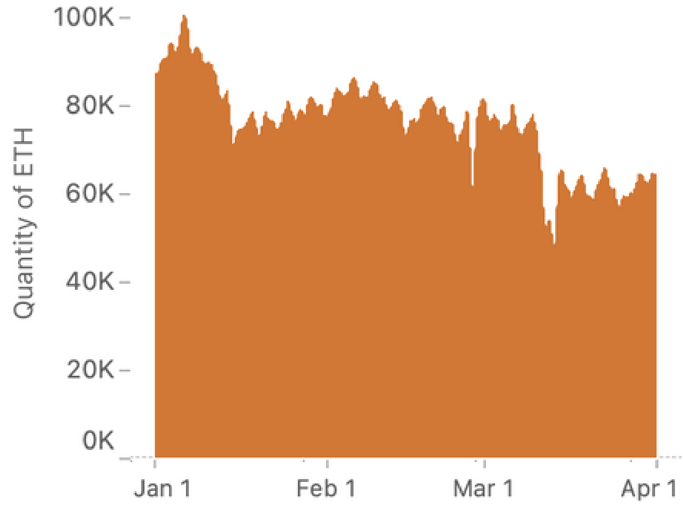
Liquidity

Aggregated 2% Market Depth

BTC-USD(T)



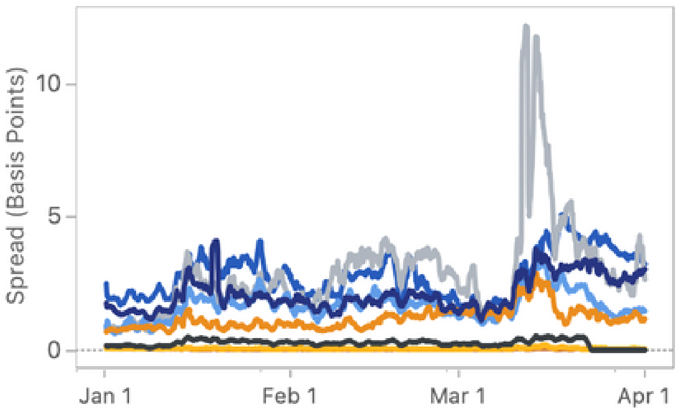
ETH-USD(T)



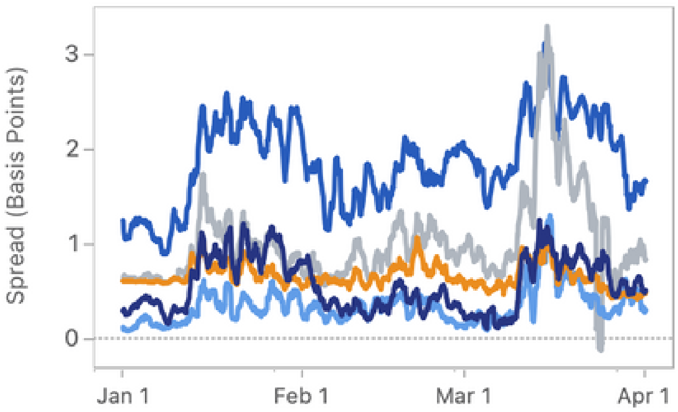
Bid-Ask Spread

Coinbase
Kraken
Binance US
Kucoin
Bitfinex
Bitstamp
Binance
OKX

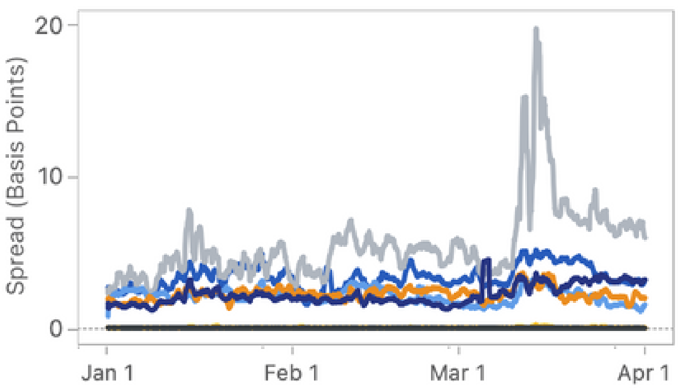
BTC-USDT



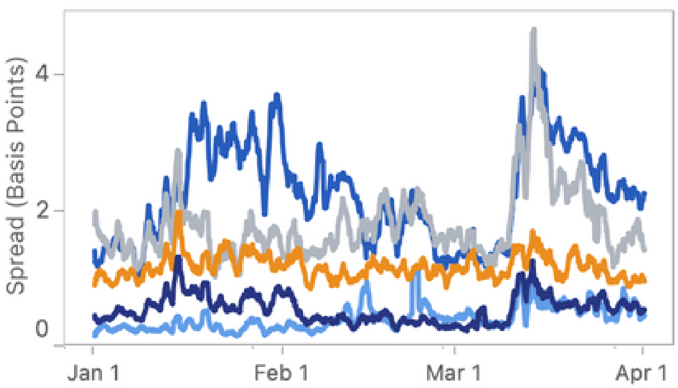
BTC-USD



ETH-USDT



ETH-USD



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