Bybit's Liquidity Resilience Post-Hack

The data behind Bybit's liquidity recovery following the largest hack in crypto history.

Kaiko Research

Overview

In February, the crypto world watched as Bybit faced an unprecedented $1.5 billion hack, making headlines as the largest in the industry's history. What followed was a true test of resilience—not just for the exchange, but for the market itself. This report uncovers how Bybit's liquidity and trading landscape weathered the storm. We'll explore the immediate market reaction, then dig into the numbers behind the recovery of the liquidity on the exchange, from price slippage to bid-ask spreads and market depth.

Within just 30 days, Bitcoin liquidity on Bybit bounced back to pre-hack levels, a clear sign that market makers regained confidence and trading conditions improved—even as general market uncertainty lingered and liquidity on other exchanges lagged behind. Supporting indicators, like narrowing bid-ask spread volatility and reduced price slippage, further highlight the exchange's swift recovery.

While trading volumes have taken a bit longer to recover, influenced by a broader global risk-off climate, market participants are steadily making their way back to Bybit, signaling a cautious but growing optimism in the aftermath of the crisis.

As an independent and trusted voice in the cryptocurrency market, Kaiko Research offers critical insight into the world of digital assets. Powered by proprietary industry-leading Kaiko data, our analysts offer unique, deep, and considered responses to market trends and events. By interrogating accurate, real-time data and contextualising market developments as they happen, we decode the complexities of the industry, offering nuanced, data-led analysis that goes beyond simple news reporting, and helps you stay one step ahead.

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IN PARTNERSHIP WITH:

BYBIT

Bybit is the world's second-largest cryptocurrency exchange by trading volume, serving a global community of over 60 million users. Founded in 2018, Bybit is redefining openness in the decentralized world by creating a simpler, open, and equal ecosystem for everyone. With a strong focus on Web3, Bybit partners strategically with leading blockchain protocols to provide robust infrastructure and drive on-chain innovation. Renowned for its secure custody, diverse marketplaces, intuitive user experience, and advanced blockchain tools, Bybit bridges the gap between TradFi and DeFi, empowering builders, creators, and enthusiasts to unlock the full potential of Web3. Discover the future of decentralized finance at Bybit.com.

The Hack and Market Response

Timeline of Events

Feb 21, 13:30 UTC
Bybit initiates routine ETH transfer

Feb 21, 14:13 UTC
Hackers exploit the cold wallet

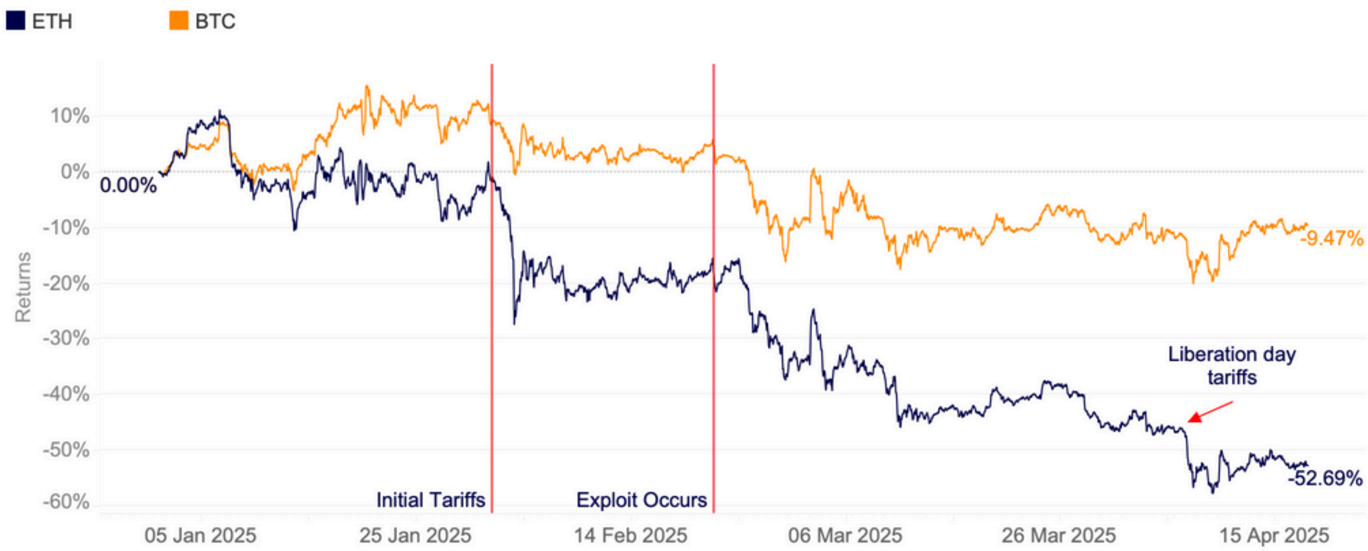
Feb 21, 15:44 UTC
Bybit CEO Confirms Hack

Feb 21, 19:09 UTC
ZachXBT links attack to Lazarus

Feb 22, 00:54 UTC
Bybit confirms successful handling of over 350k withdrawals

Shortly after midday UTC on Friday, one of the world's largest crypto exchanges, Bybit, was hacked for $1.5 billion. During a planned, routine transfer, the transaction was manipulated by a sophisticated attack that masked the signing interface of SAFE, a third-party signature service, enabling the attacker to gain control of one of Bybit's ETH Cold Wallets. Transparency from Bybit and the firm's CEO, Ben Zhou, during and after the incident likely offset some of the initial market reaction as it removed ambiguity from the equation.

Market Reaction to Exploit



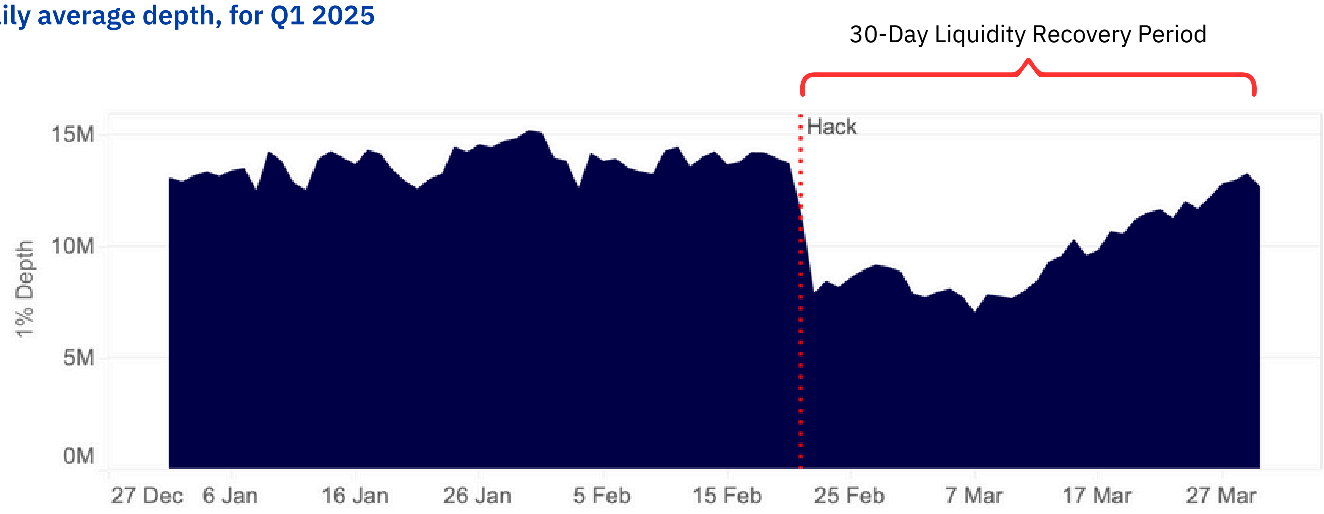
Source: Kaiko Fair Market Value.

Before the Feb 21 hack, the market was already trending lower amid concerns about slower growth and rising inflation driven by new U.S. tariffs. Early February marked a turning point—ETH was steady until President Trump's Feb 1 tariff announcement, then dropped 27 percentage points in the days that followed. Prices continued to fall on further tariff and macro, with the exploit itself causing only a brief disturbance. Market trended lower after the hack due to PCE inflation data and other factors.

Bybit Liquidity 30-Day Recovery

Bitcoin 1% Market Depth on Bybit

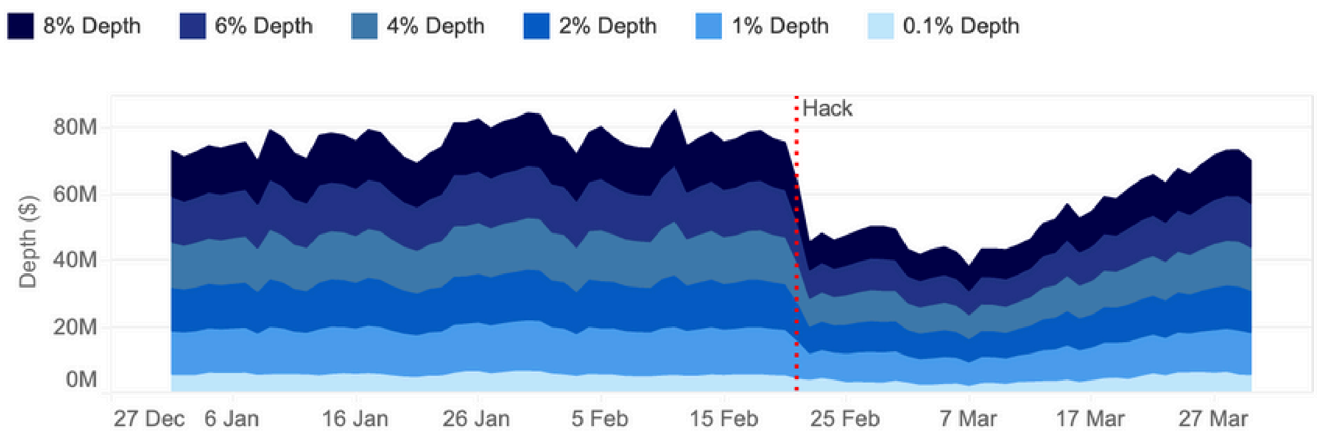
Daily average depth, for Q1 2025



Source: Kaiko Market Explorer .

Despite challenging market conditions for Bitcoin following a dramatic shift in U.S. trade policy, Bitcoin's 1% market depth on Bybit fully recovered just 30 days after the hack, ending the quarter with a daily average of $13 million.

Bitcoin Liquidity Recovers Across the Bybit Order Books



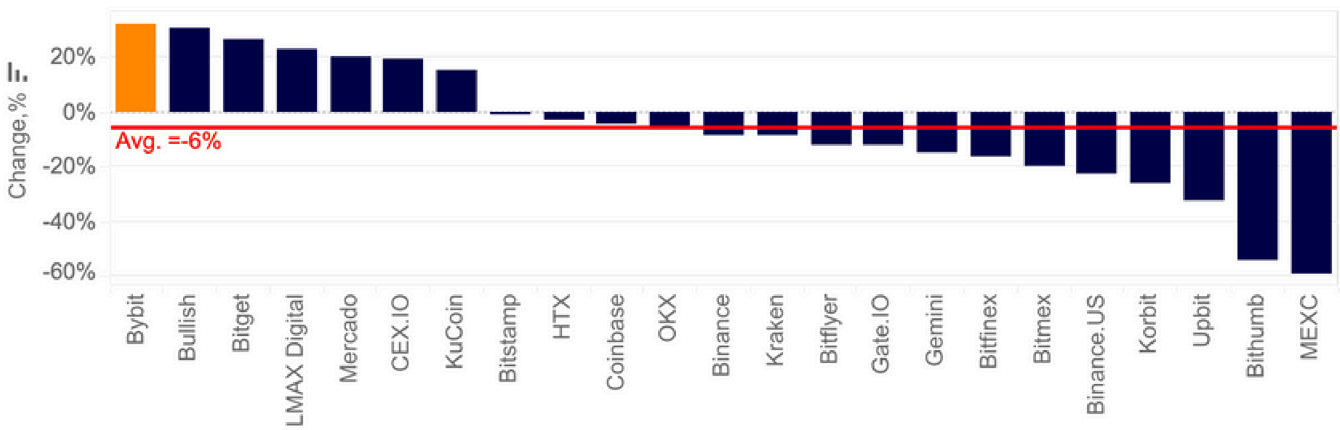
Source:Kaiko Market Explorer.

Market depth on Bybit's Bitcoin markets has improved across all levels, from 0.1% to 8% of the mid-price, resulting in totally recovered trading conditions for all users. Higher liquidity near the mid-price allows traders to execute orders quickly with minimal slippage and tighter spreads, while increased liquidity further from the mid-price provides more opportunities for those seeking to enter or exit positions during larger price movements.

Bybit Outpaces Peers in Liquidity Rebound

Percentage Change in Bitcoin Liquidity Since the Bybit Hack

Change in the 0.1% btc market depth as of end-March



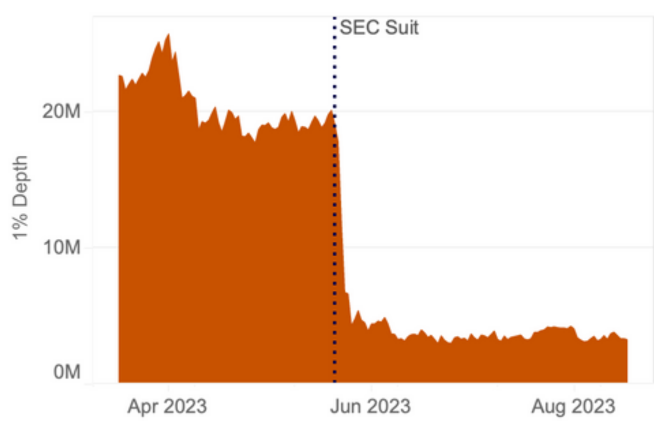
Source: Kaiko Market Explorer.

Rising market uncertainty, driven by new U.S. tariffs, has led traders to favor traditional safe havens over cryptocurrencies, causing liquidity to drop across most crypto exchanges since February. Platforms like HTX, Bithumb, and MEXC saw double-digit declines in liquidity in the month following the Bybit hack.

Bybit, however, proved to be a notable exception: despite the generally bearish environment and the impact of the hack itself, its liquidity not only recovered but surged over 30% since the day of the hack, underscoring rapid growth in the face of challenging market conditions.

Binance.US Liquidty Post-SEC Suit

1% market depth for btc,eth and top altcoins



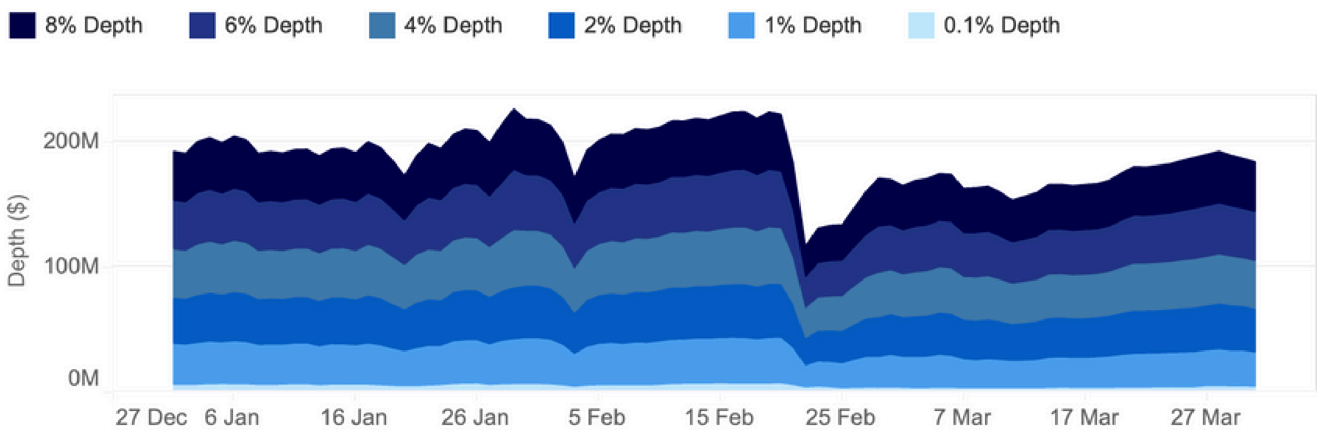
Source: Kaiko Market Explorer.

Major disruptions can create lasting liquidity gaps. Binance.US, for instance, lost 80% of its liquidity after the June 2023 SEC lawsuit and has yet to recover. In contrast, Bybit swiftly restored both liquidity and user confidence after the largest institutional hack ever, demonstrating a much faster recovery than seen in cases like Binance.US.

Altcoin Liquidity Post-Hack Recovery

Altcoin Market Depth on Bybit

Top 30 altcoins by market cap



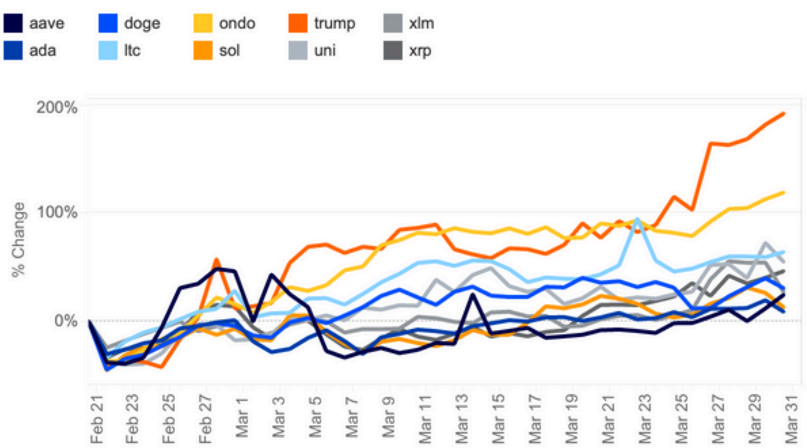
Source: Kaiko Market Explorer.

Altcoin liquidity on Bybit has also rebounded, though more slowly than Bitcoin's. This lag is largely due to the risk-off market environment, which has impacted altcoins more severely. While Bitcoin is still seen as a risky asset, it remains the crypto market's safe haven, making altcoins less attractive to traders and market makers during periods of uncertainty.

Nevertheless, market depth for the top 30 altcoins by market cap has recovered to over 80% of pre-hack levels, with improvements seen broadly across the order book, similar to Bitcoin.

Change in Altcoin Liquidity Since the Bybit Hack

Percentage change in 1% depth, native units



Source: Kaiko Market Explorer.

Excluding price effects and focusing on percentage changes in 1% depth (in native units), most tokens have seen increased liquidity. This suggests that market makers have maintained or boosted their exposure since the hack. Notably, ONDO, UNI, and LTC each recorded over a 50% rise in 1% depth on Bybit between February 21 and March 31.

Bybit’s Retail Price Improvement

Retail Price Improvement (RPI) Orders: How Does it Work?

What is RPI ?	Special order type placed by institutional liquidity providers, designed to give retail traders (manual/Ul) access to improved prices and liquidity.
Who Benefits from the RPI?	Retail traders trading manually via Bybit's website/Ul.
Who is excluded from the RPI?	Institutional and algorithmic/API traders cannot access or match with RPl orders.
How it works?	RPI orders are included in the order book, but only retail Ul takers can match with them; they are not visible as a separate order type in the API.
Market impact	Deeper liquidity, tighter spreads, better trading conditions, especially during periods of volatility (e.g., post-hack).
Launch date	February 20, 2025 (just before Bybit's hack).
Stabilization role	Helped maintain pricing efficiency and market stability when non-RPI liquidity declined.
Fairness	Levels the playing field for retail traders by shielding them from high-speed algorithmic competition.

Just a day before the hack, on February 20, 2025, Bybit launched Retail Price Improvement (RPI) orders—a key innovation that strengthened market liquidity during the turbulent period that followed.

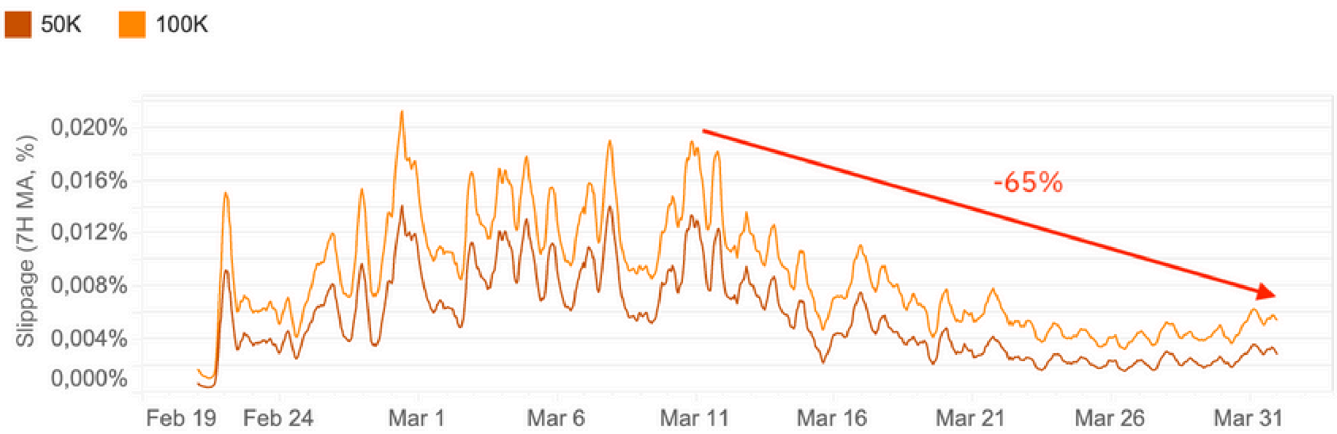
Designed to benefit retail traders manually executing trades via Bybit's interface (not accessible via API), RPI orders are a specialized subset of maker orders placed by institutional liquidity providers but off limits for institutional or algorithmic participants via API.

This structure creates a deeper pool of matchable orders for on-screen traders, resulting in tighter spreads, and greater order book depth—especially in high-volume markets like BTC, ETH, SOL, XRP and DOGE. As non-RPI liquidity temporarily declined following the hack, RPI orders helped stabilize trading conditions by enhancing pricing efficiency. These orders became increasingly prominent through March, ultimately helping to level the playing field between retail and institutional traders by providing retail traders exclusive access to better prices while protecting them from high-speed algorithmic trading.

Trade Execution Costs

BTC-USDT Price Slippage on Bybit Improved by End of March

Hourly price slippage for a simulated $50K and $100k sell order

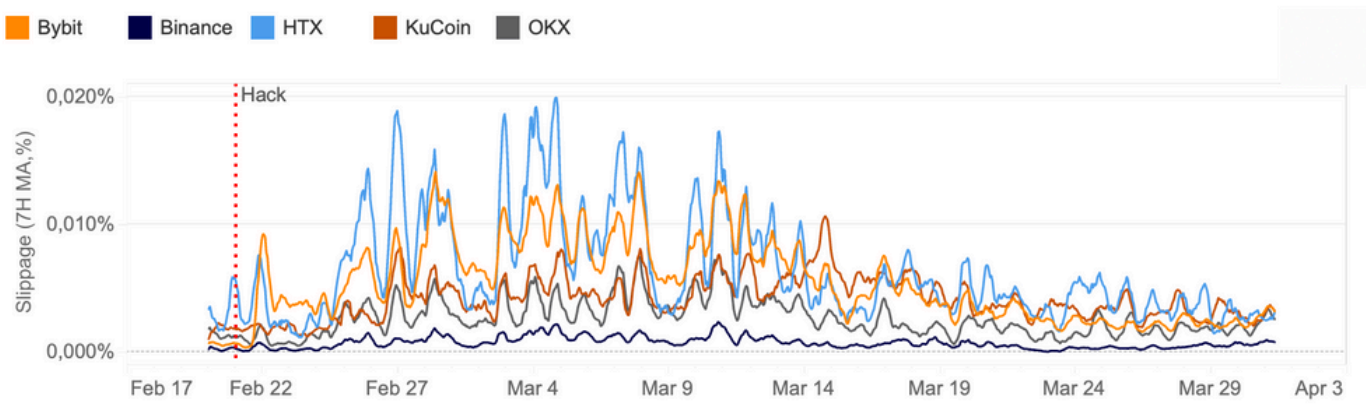


Source: Kaiko Level 1 & Level 2 Market Data Feeds.

Price slippage is the difference between the expected and actual trade price, reflecting execution costs. After the hack, Bitcoin slippage for simulated $50K and $100K sell orders on Bybit initially rose but stabilized by the end of March at 0.003% and 0.006%, respectively—both below early March averages. This marked a 60% decline from early March to the end of March 2025.

BTC-USDT Price Slippage

For a $50K simulated sell order

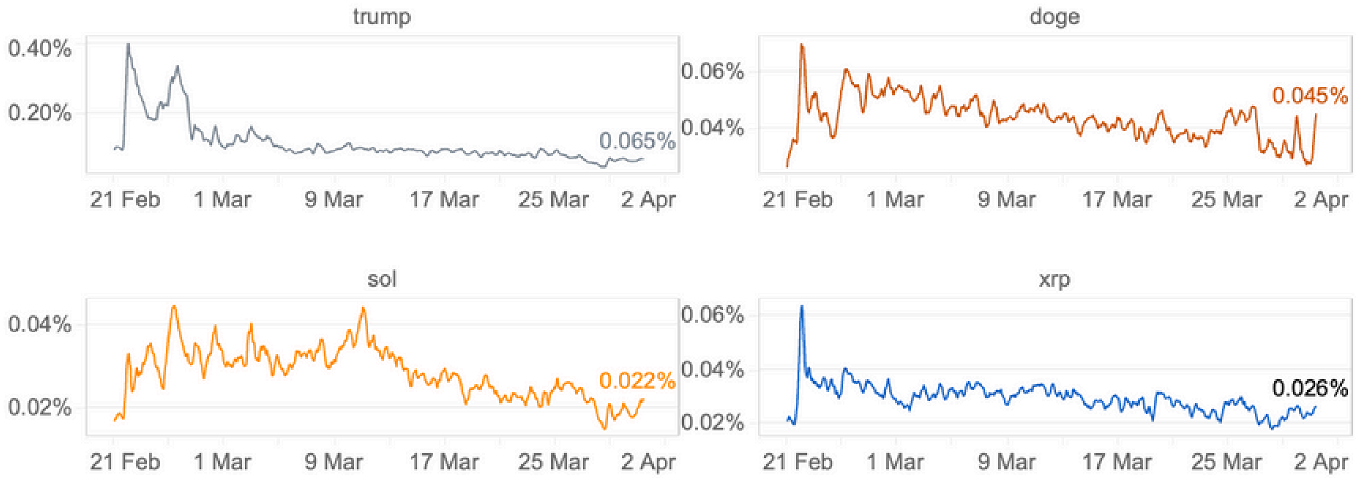


Source: Kaiko Level 1 & Level 2 Market Data Feeds.

When comparing price slippage for the BTC-USDT pair on Bybit and other exchanges before and after the hack, we see that Bybit's slippage returned to normal by the end of the quarter. It even dropped below the levels on HTX and KuCoin, and matched OKX. The chart also shows that the increase in slippage after the hack happened on all exchanges, not just Bybit. This rise took place a few days before the U.S. announced its new trade policy on tariffs.

Average Altcoin Price Slippage on Bybit

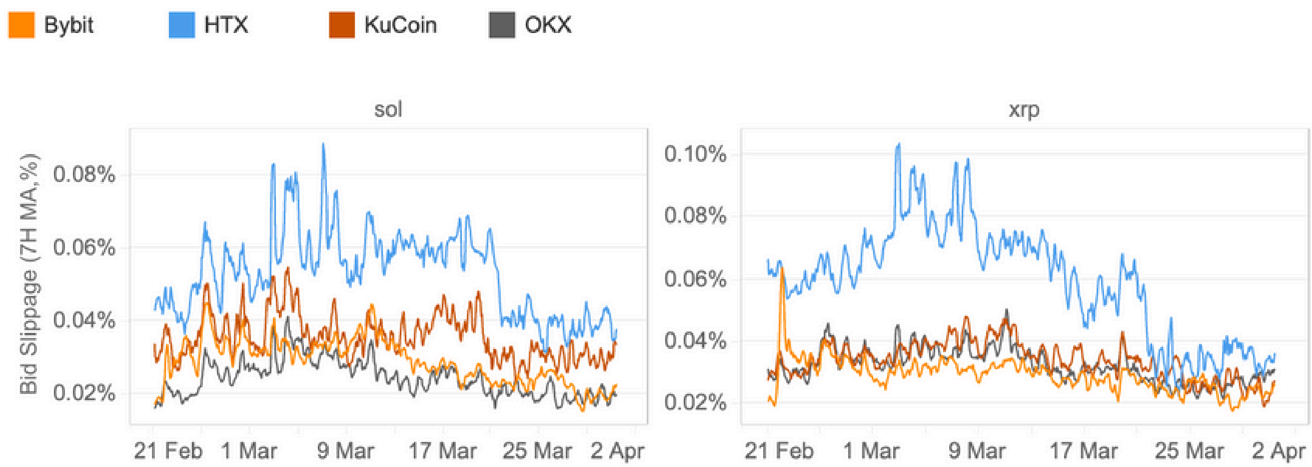
Hourly slippage for $50K sell order (7H MA, %)



Source: Kaiko Level 1 & Level 2 Market Data Feeds.

Price slippage for major altcoins has also decreased since the hack, indicating that improved liquidity conditions extended beyond BTC to other assets as well. By the end of March, slippage for a simulated $50,000 sell order had stabilized at 0.06% for TRUMP-USDT and 0.02% for XRP-USDT on Bybit, resulting in average price impacts of less than $20.

Average Price Slippage for a $50K Simulated Sell Order

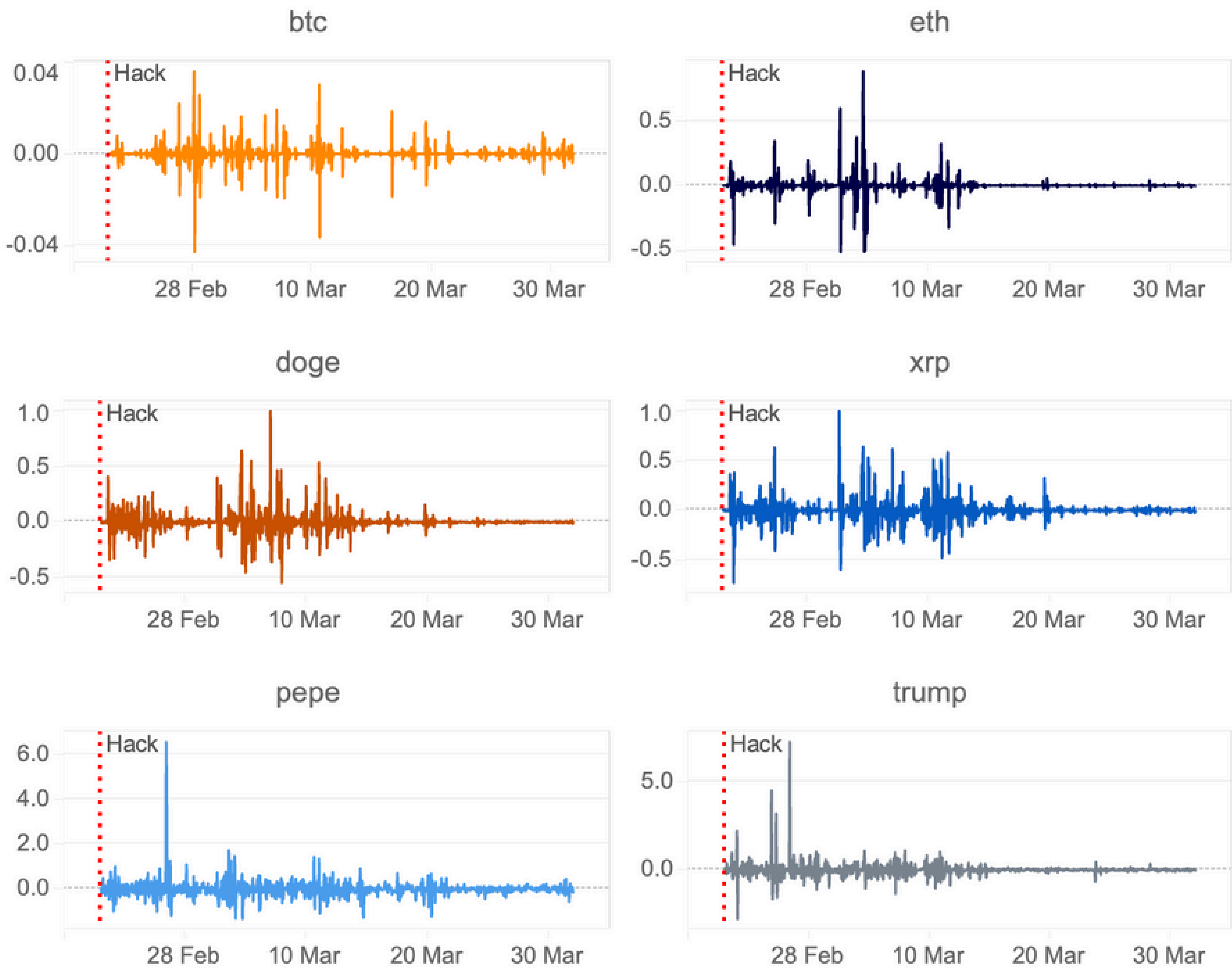


Source: Kaiko Level 1 & Level 2 Market Data Feeds.

Comparing with other exchanges, XRP and SOL exhibited relatively moderate slippage on Bybit despite recent events. By March end, slippage on Bybit was even lower than on other major platforms like HTX, KuCoin, and OKX.

Spread Volatility Normalises

Hourly Change in the Bid-Ask Spreads on Bybit



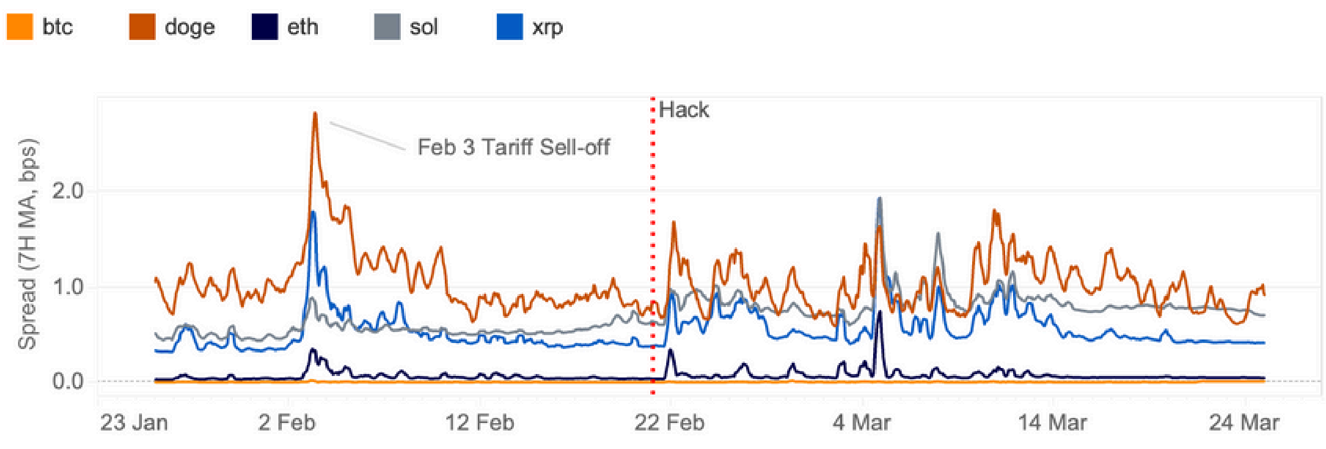
Source: Kaiko Level 1 & Level 2 Market Data Feeds.

Since the end of February, hourly fluctuations in the bid-ask spread (measured in basis points) for most tokens have declined, indicating that liquidity conditions on Bybit have become more stable.

The bid-ask spread, is often is used as transaction costs proxy for market takers executing trades against existing orders. However, spread behaviors can differ from one exchange to another, shaped by infrastructure, incentives for market makers, and fee structures.

Market makers often widen spreads during uncertain periods to offset higher risks, so changes in spread volatility can signal shifts in market risk perception. The recent drop in spread volatility points to a more stable and liquid trading environment on Bybit.

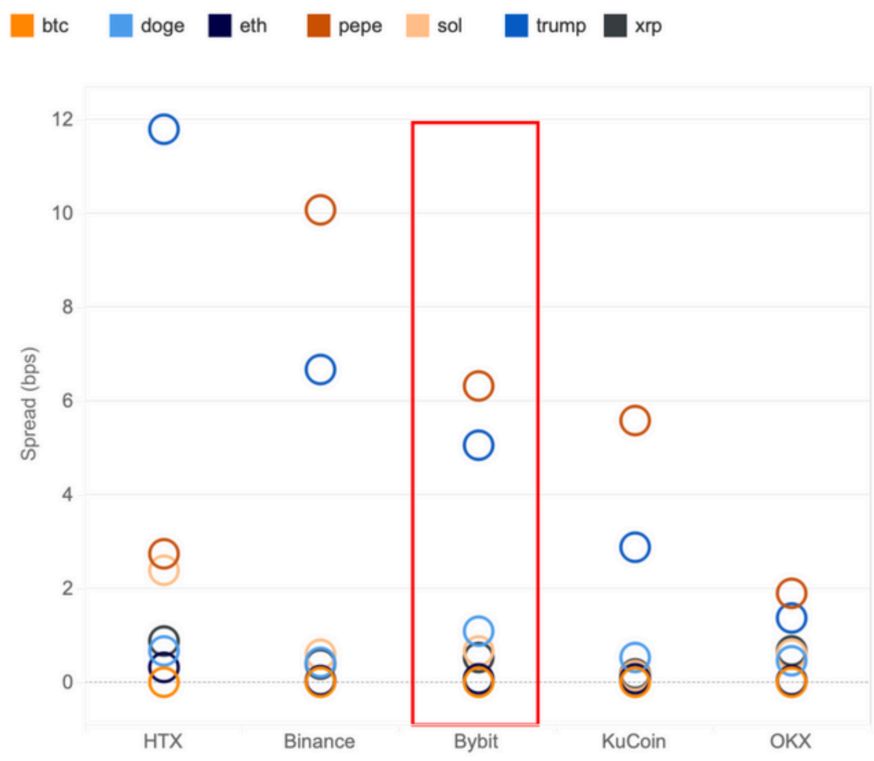
Hourly Bid-Ask Spreads on Bybit



Source: Kaiko Level 1 & Level 2 Market Data Feeds.

Despite increased volatility, most tokens showed declining bid-ask spreads compared to early 2025. TRUMP demonstrated the strongest improvement, with spreads tightening by 9 basis points from its volatile January launch. DOGE and XRP improved by 0.7 and 0.2 basis points respectively, while BTC and ETH spreads increased marginally by 0.001 basis points during Q1.

Average Bid Ask Spread in Q1 2025 on Bybit



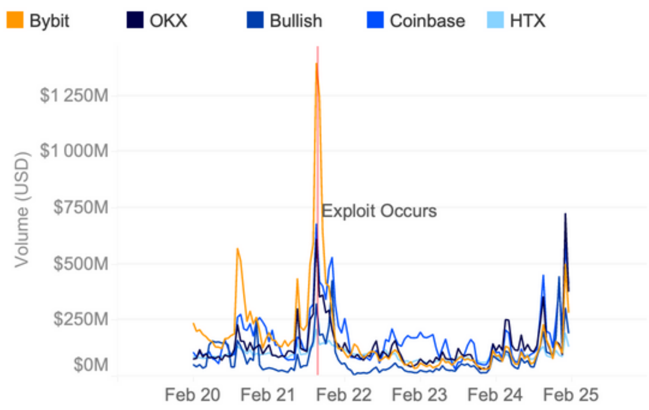
Source: Kaiko Level 1 & Level 2 Market Data Feeds.

In Q1, Bybit offered competitive trading costs for major tokens like BTC and ETH, with spreads similar to those on Binance and OKX. While spreads for riskier tokens like PEPE and TRUMP were wider on Bybit, they remained tighter than on Binance and HTX, indicating that Bybit provided relatively favorable trading conditions across both established and riskier assets.

Trade Volumes Bounce Back

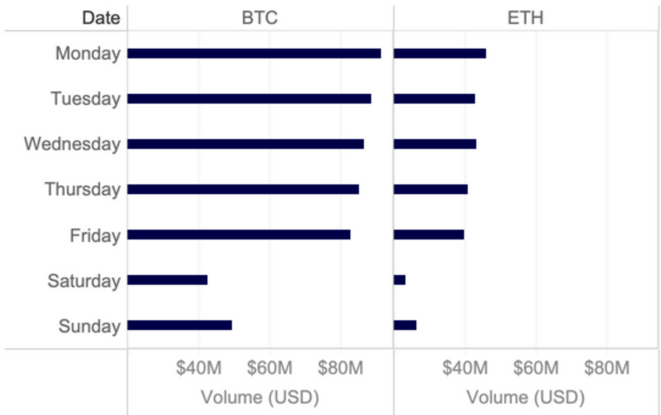
Because the exploit occurred during a broader market downturn, Bybit's trading volumes after the hack mirrored those of similar exchanges like OKX, Bullish, Coinbase, and HTX. The volume decline was part of a wider market trend, not a direct result of the exploit, indicating that user confidence in Bybit remained largely intact.

Hourly Trade Volume



Source: Kaiko Market Explorer.

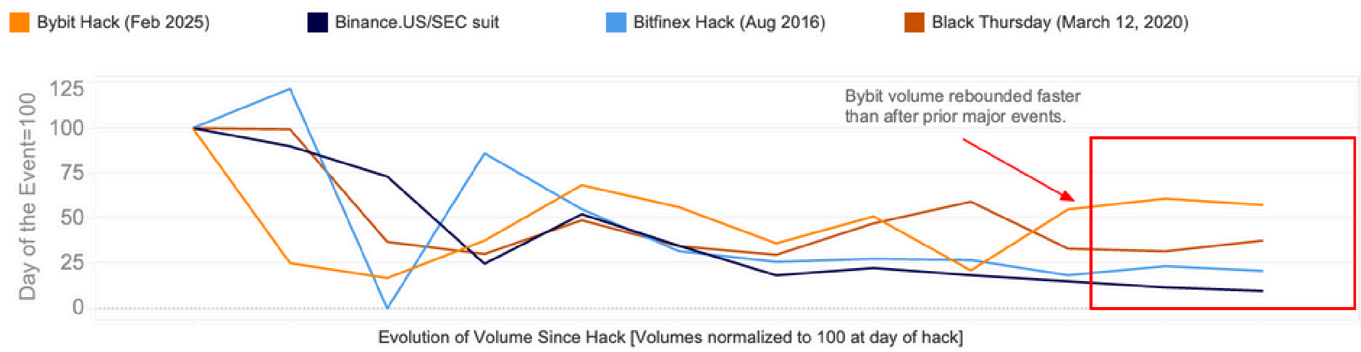
Average Daily BTC & ETH Volume



Source: Kaiko Market Explorer.

A closer look at the data shows that trading volumes on Bybit briefly spiked to $1.2 billion per hour immediately after the hack was announced, likely due to panic and increased withdrawals. This surge was quickly followed by a sharp drop in volume. However, this decline was mostly in line with typical market patterns: the hack occurred on a Friday evening, when trading activity usually tapers off, and volumes are typically much lower over the weekend.

Volume change post-major market events



Source: Kaiko Market Explorer.

The quick recovery in trading volumes—faster than after past incidents like the 2016 Bitfinex hack, the Binance.US SEC suit, or Black Thursday—suggests that the decline was driven more by general market sentiment than the hack itself. This underscores both the market's resilience and traders' continued confidence.

Key Findings

Transparency

Bybit’s transparency helped set it apart compared to other platforms after similar events. While others had prolonged liquidity drops after shocks, Bybit demonstrated rapid recovery and growing user trust.

Fast turnaround

Despite suffering the largest hack in crypto history, Bybit's Bitcoin liquidity—measured by 1% market depth—rebounded to pre-hack levels within a month.

Liquidity Improvement

The timely launch of Retail Price Improvement (RPI) orders helped stabilize trading conditions for manual traders, offering improved spreads and depth.

Spreads

Bybit saw a general tightening of bid-ask spreads post-hack, even for volatile assets like TRUMP and PEPE, signaling improved market confidence.

Trade Volume

Bybit’s trading volumes briefly spiked post-hack before dipping in line with weekend trends, then recovered faster than after past crises, mirroring broader market patterns and signaling resilient user confidence.

Conclusion

Just under 4% of funds have been frozen since the February 21 attack, while 27.6% have gone dark. This leaves just under 69% still traceable. In spite of the large amount of outstanding funds still missing, activity on Bybit has already bounced back, showing tremendous resilience in the face of the largest hack of all time.

Bybit’s handling of the February 2025 hack highlights how transparency and retail-focused innovation can preserve liquidity during periods of market stress. The fast recovery of liquidity on the exchange underscores the robustness of its trading ecosystem, while setting a new standard for incident response in crypto markets.

While volatility remains elevated due to macroeconomic uncertainties, Bybit's case reinforces the importance of prioritizing both institutional-grade systems and retail accessibility. The ability of market makers on the exchange to maintain tight spreads and low slippage will remain crucial going forward.

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