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MONTHLY OVERVIEW

February proved to be one of the most volatile months for global financial markets in recent memory, with equities entering correction territory cryptocurrencies plummeting before and performing an almost miraculous comeback. Throughout the month, Bitcoin traded between \$34,700 and \$43,300, extreme even by the crypto industry's standards. As the Russian invasion unfolded, crypto trade volumes for Ruble and Ukrainian Hryvnia trading pairs spiked, particularly for stablecoins, which could serve as a powerful safe haven asset while also enabling the circumvention of sanctions. Russia's invasion of Ukraine places the cryptocurrency industry in a unique and precarious position, needing to balance sanctions enforcement while lacking the power to restrict transactions on decentralized networks. This month's report explores the aftermath of the invasion and how cryptocurrency markets reacted.

Written by Dessislava Aubert and Clara Medalie with help from the Kaiko team.

About Kaiko

Kaiko is the leading cryptocurrency market data provider for institutional investors and enterprises. We empower market participants with accurate, transparent, and actionable financial data to be leveraged for a range of market activities. Our institutional grade data services enable seamless connectivity to historical and live data feeds across 100+ spot and derivatives exchanges. Contact us at hello@kaiko.com to learn more about our data and research services.



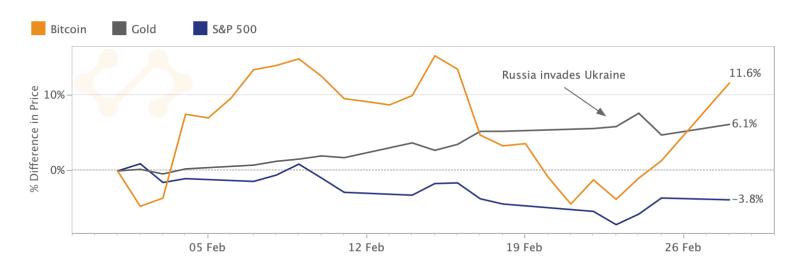


Geopolitical Crisis Rattles Markets

The sharp escalation of the Russia-Ukraine conflict spurred a dramatic sell-off across global financial markets: Bitcoin plummeted, the S&P 500 entered a technical correction, and commodities prices surged on supply disruption fears. However, crypto markets quickly came back to life, with Bitcoin gaining a whopping 15% in the final 2 days of the month. The surge in spot prices was boosted by short liquidations on derivatives markets in addition to strong spot market demand, linked to evolving sentiment regarding crypto's role in the crisis. By the end of the month, Bitcoin had outperformed gold and most other traditional assets including U.S. Treasuries and safe-haven currencies, which are generally perceived as a geopolitical hedge.

Bitcoin vs. Traditional Assets

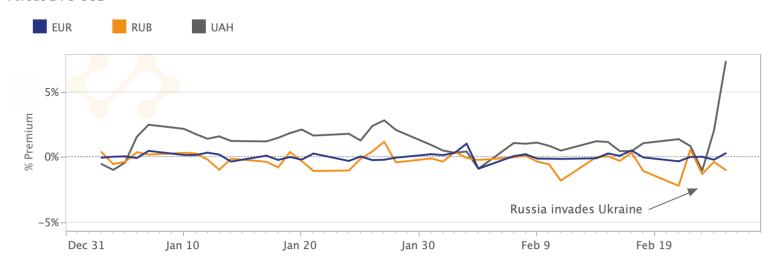
Returns since February 1st



Immediately following Russia's invasion, Bitcoin traded at a 6% premium on Binance's Ukrainian Hryvnia (UAH) market as demand for cryptocurrencies soared. Local Ukrainian currency markets faced significant disruptions, with the Ukrainian central bank temporarily halting foreign currency withdrawals and the Hryvnia falling to all time lows versus the U.S. Dollar. The premium measures the difference between the price of Bitcoin on UAH markets versus USD markets.

Bitcoin Premium on Ukranian Markets







Tether Surges vs. Ruble and Hyrvnia

USDT spiked to its highest level ever versus the Ukranian Hryvnia as the fiat currency sank to a historical low versus the U.S. Dollar. As of end-February, 1 USDT was trading for more than 32 UAH. USDT is also trading at record highs versus the Russian Ruble as the currency sinks to all-time lows following a round of harsh sanctions. Increased demand for stablecoins could result in issuers facing significant pressure to monitor addresses to avoid violating international sanctions.

Tether Exchange Rate for Russian and Ukranian Markets

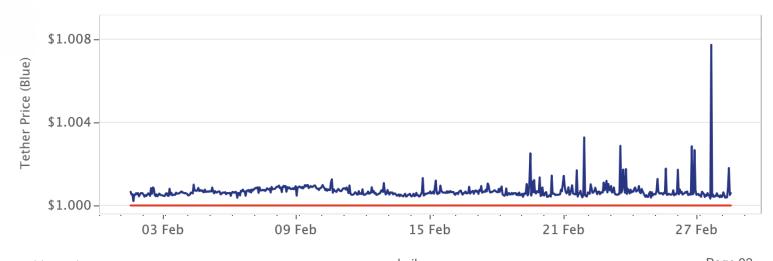
USDT-RUB and USDT-UAH aggregated price



The largest stablecoin by market cap, Tether (USDT), diverged from its one-to-one peg to the U.S. Dollar during February's extreme market volatility. USDT traded above \$1.007 on Feb 28, its highest level since November 2021. Stablecoins often diverge from their peg in times of volatility as traders rotate funds out of crypto assets and into safe havens. The volatility has persisted since the start of the Russia-Ukraine crisis.

Tether Premium

Aggregated USDT-USD price on 10 exchanges

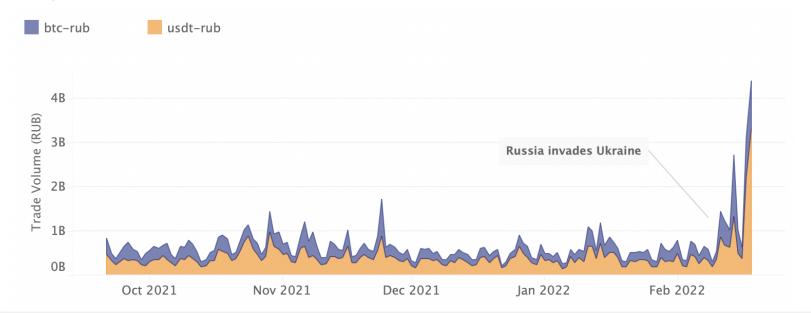




Trade Volume Spikes Following Invasion

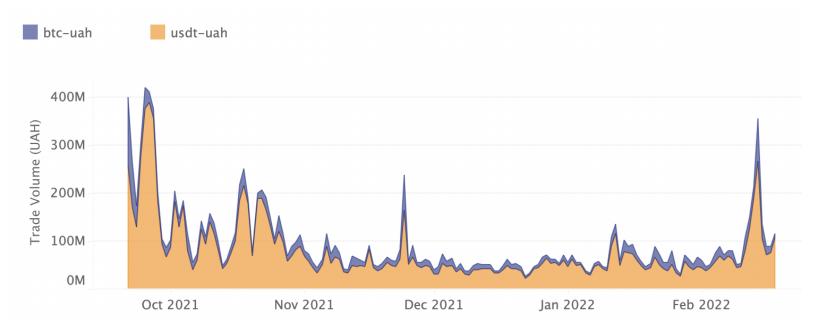
Both Ruble and Hryvnia trade volumes surged to their highest levels in months almost immediately after the Russian invasion, highlighting the complexities of the cryptocurrency industry's role in the conflict. In particular, USDT-RUB trade volumes spiked to all time highs and accounted for higher volumes than BTC-RUB markets. A plummeting Ruble and reduced access to the U.S. Dollar amid waves of sanctions could particularly heighten the appeal of USD-pegged stablecoins, more so than Bitcoin, which remains highly volatile.

Daily Ruble Trade Volume



UAH crypto volumes soared to 5 month highs and Ukraine's official twitter account even posted several requests for cryptocurrency donations over the weekend as Ukraine's banking services suffered disruptions. The <u>veracity</u> of the messages is still being determined amid the strong possibility of Russian cyberattacks, although millions of dollars worth of Bitcoin and Ethereum have accumulated in the addresses listed.

Daily Hryvnia Trade Volume



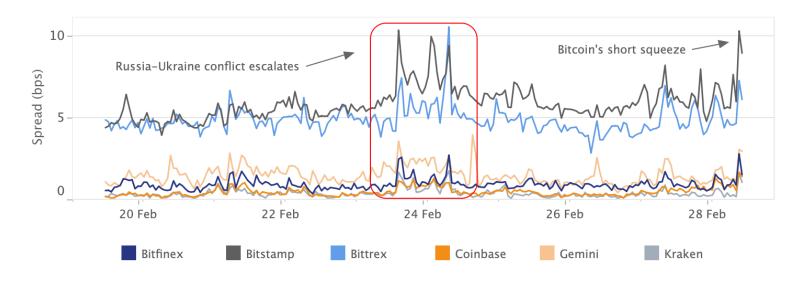


Liquidity Deteriorates Amid Volatility

Bitcoin's massive price swings have caused liquidity to deteriorate for the largest BTC-USD markets. The bid-ask spread spiked on nearly every exchange as Bitcoin's price plummeted in the aftermath of the invasion, with spreads exceeding 10bps on Bittrex and Bitstamp. The volatility returned on Monday as Bitcoin surged above \$44k. Overall, spreads remain more volatile and consistently higher on average than January, which suggests market makers are remaining cautious amid high uncertainty.

Bid-Ask Spread

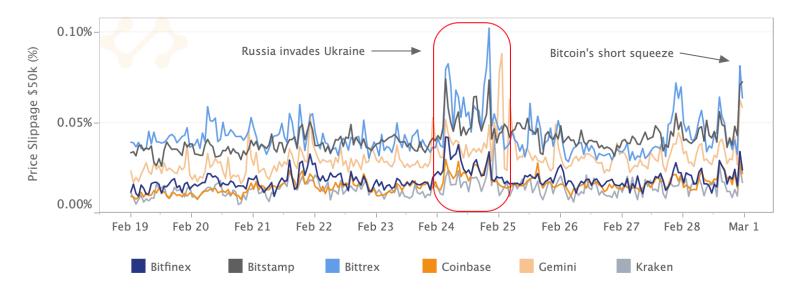
BTC-USD trading pairs



Price slippage, defined as the difference between the expected price of a trade and the price at which the trade is fully executed, also underwent a sharp spike and ongoing volatility. Below, we chart the average BTC-USD slippage for a simulated \$50k sell order on six exchanges and can observe high slippage as markets sold off following the escalation of the Russia-Ukraine conflict as well as during Bitcoin's short squeeze on Feb 28.

Average Price Slippage

BTC-USD trading pairs

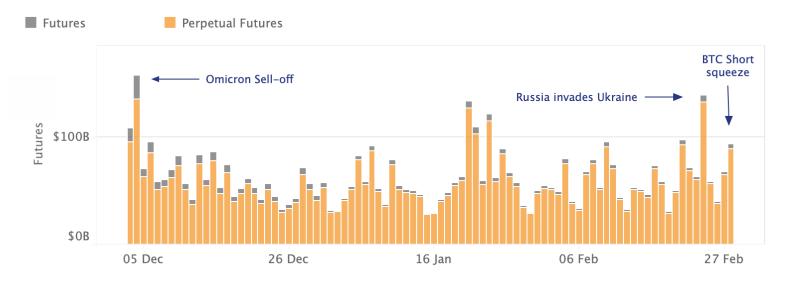




Low Derivatives Volume Despite Volatility

Despite Bitcoin's historic 15% surge on February 27-28, overall derivatives inflows have remained low for the past few months. Bitcoin futures and perpetual futures volumes underwent a slight spike on Feb 24th to \$140B, their highest level since the Omicron crash. Yet, volumes remained low throughout a supposed short squeeze, which suggests demand in spot markets contributed to Bitcoin's gains above \$44k.

Bitcoin Perpetual Futures Trade Volume



Average Bitcoin perpetual futures funding rates have also been neutral throughout the past month, dipping negative in times of volatility before reverting to the mean. Funding rates are the cost of holding a long position and a gauge of market sentiment, and tend to be positive during bull runs, and negative during bear markets. The current trend suggest uncertainty has increased in February.

Average Funding Rate

Bitcoin Perpetual Futures



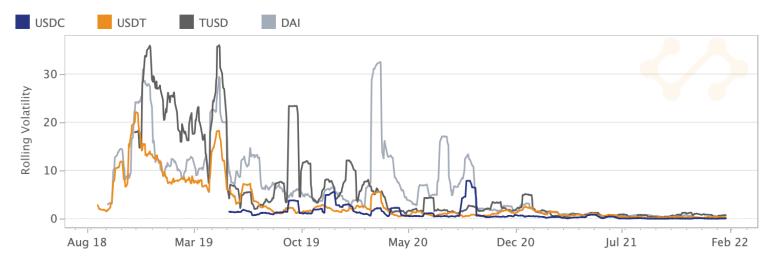
Source: Kaiko derivatives data, averaged accross Binance, Bitmex, Derbit, FTX, Kraken and Bybit.



Stablecoins Are More Stable

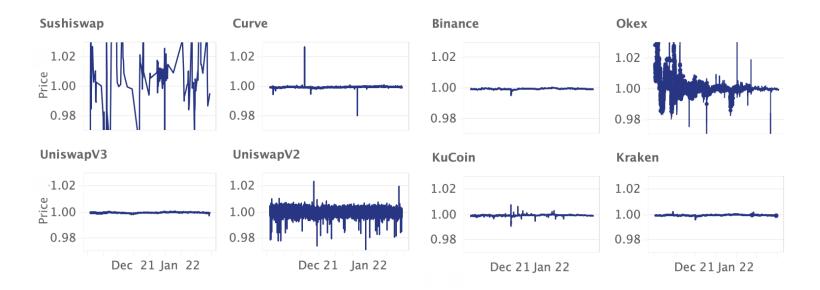
The recent surge in demand for stablecoins on rising geopolitical instability has put significant pressure on their peg. The top stablecoins are pegged 1:1 to the U.S. Dollar, using a collateralization by cash or securities as a stabilization mechanism. As we saw over the past few days, in times of market volatility, stablecoins can deviate from their peg as traders rotate from riskier altcoins and rapidly exit their positions. However, the market has matured significantly over the past few years and stablecoin volatility on centralized exchanges has declined. While until 2020, volatility varied between 10% and 35%, it is currently lower than 5%.

Stablecoin 20D Volatility



Stablecoins tend to experience more volatility on decentralized exchanges, which have lower liquidity compared with centralized exchanges. Liquidity is extremely important for stablecoins to maintain their 1:1 USD pegs, and we can best observe price efficiency by studying stablecoin pairs. We chart the 15 minute volume-weighted average price for 8 USDC-USDT pairs. We observe that the USDC-USDT price varies more on DEXs compared to CEXs, with Sushiswap registering the largest price deviations. However, Uniswap's <u>upgrade</u> from V2 to V3 strongly improved price efficiency for stablecoins, which suggests DEXs could soon be competitive with CEXs.

USDC-USDT Price

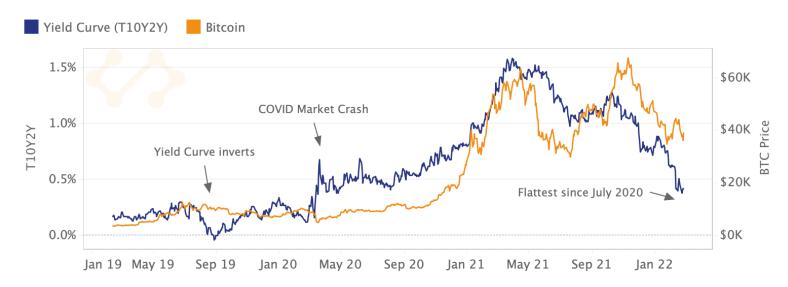




High Inflation Persists

Despite the escalation of the Russia-Ukraine conflict, the U.S. Fed is <u>holding</u> strong on its hawkish policy, as surging commodities and base metal are expected to additionally fuel inflationary pressures. However, the U.S. yield curve —the gap between the 10-year treasury yield and its 2-year equivalent—has flattened to its lowest level since July 2020 suggesting fears of a slowdown in economic growth are mounting. Typically, a negative or inverted yield curve is seen as an indicator of recession while a positive (steep) yield curve has historically been correlated with stronger economic activity and a stock market rally. While the U.S. central bank is still widely expected to hike its policy rate at its March FOMC meeting, markets are pricing out an aggressive 50bps move.

Bitcoin vs. The U.S. Yield Curve



U.S.consumer price inflation climbed 7.5% in January, hitting another multi-decade high and showed little signs of easing. The increase was driven by both rising goods and services costs, a sign of broadening inflationary pressures. We can observe that BTC has moved in tandem with rising costs for most of last year before decoupling in November. While inflation continued surging, crypto assets tumbled alongside tech equities as the U.S. Fed took a hawkish shift, retiring the term "transitory inflation" and starting to taper its monthly bond purchases.

Bitcoin vs. Inflation

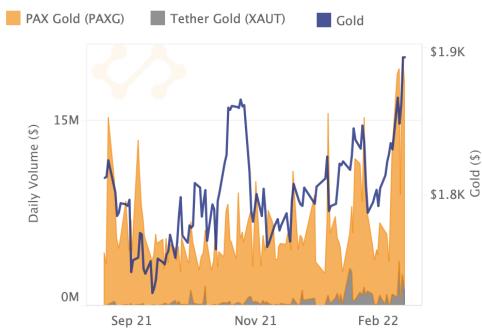




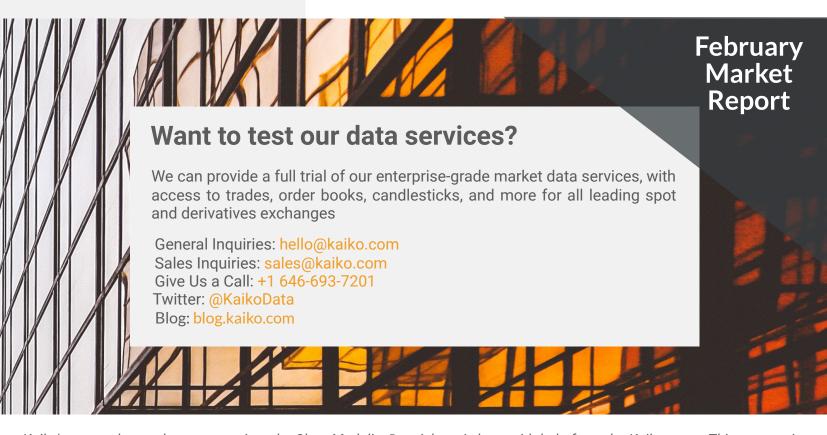
Gold-Backed Stablecoins Gain Traction

Geopolitical instability and high inflation has boosted the appeal of Gold, which rallied 6% in February. Gold-backed stablecoins— digital tokens backed by physical gold also gained traction. We chart Gold prices alongside the daily trade volume for the two largest tokens by market cap, Tether Gold (XAUT) and PAX Gold (PAXG). We can observe that PAX Gold volumes have nearly doubled since September and Tether Gold volumes have also seen a slight surge in trading. Overall, USD-pegged stablecoins remain dominant in terms of market cap and trade volume, with gold-backed stablecoins offered on only a handful of exchanges.

Trade Volume of Gold-backed Stablecoins



Source: Quandl, Kaiko asset prices for paxg-usdt, paxg-ftxusd, pax-usd,xaut-usdt and xaut-ftxusd.



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