

Key Takeaways

- Hike probabilities now expect back to back 75 bp raises in Nov and Dec
- YoY CPI declined slightly while YoY Core CPI has continued to rise
- Markets remain data dependent and reactionary to monthly prints

Traditional Market Commentary

Last Thursday's CPI numbers rocked markets, spreading volatility across all sectors. While CPI year over year declined slightly to 8.2%, monthly numbers rose higher than expected to 0.4% from 0.1%. Yearly core CPI, excluding energy and food, jumped to 6.6%, while monthly core CPI remained unchanged. Initial reaction by investors sent equities lower as rates spiked. But a steady grind began and by day's end the S&P 500 finished almost 100 points higher, with the 10-year treasury only 5 bps higher. Initial jobless claims rose slightly to 228k, still at historically low levels, then the University of Michigan consumer sentiment edged higher close to 60 providing some light after a busy week.

Investors continue to hope for some type of sign of a possible pivot from the Fed. However, markets are currently pricing in two more 75 bp hikes in early November and mid-December, with only 25 bps expected in February before reaching a terminal rate range of 4.75-5.00%, which is expected to stay through most of 2023. Fed governors have been communicating the same message of hike till inflation is controlled, but some strategists are now questioning whether hikes are becoming more of a detriment to the overall economy than helping it. Could it be consumer discretionary behavior in housing, rent, food, or non-business travel is causing prices to remain higher? Unfortunately, economies will have to remain patient and find solutions in the near term before more data can help strategize.

As the winter months begin, the war in Ukraine enters its seventh month with ongoing concerns over energy and how households will remain warm. Although liquid natural gas prices have declined in recent weeks, a seasonal winter spike in demand is just around the corner.

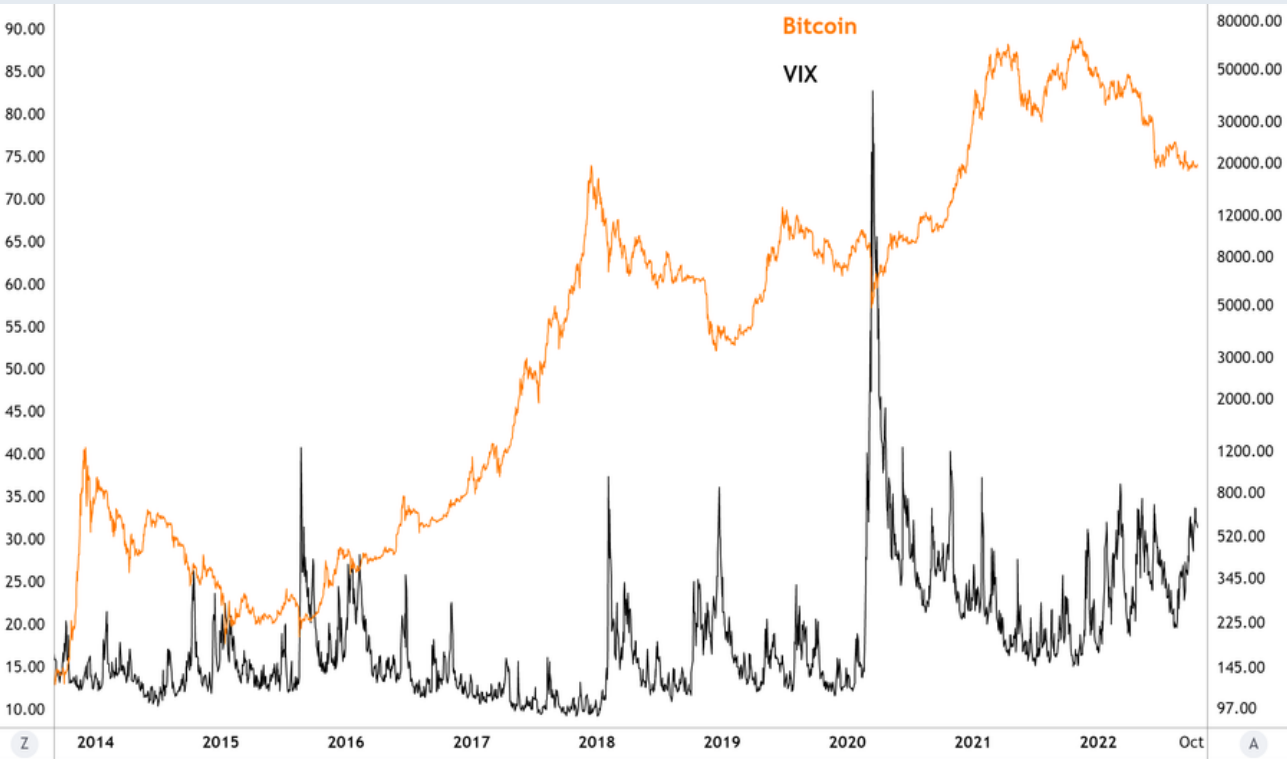
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Indices	Ticker	Price (\$)	Returns (%)				
			1 week	1 month	3 month	YTD	1 year
S&P 500	SPX	3583	-1.55	-7.49	-7.25	-24.82	-19.87
Nasdaq 100	NDX	10692	-3.15	-9.86	-10.78	-34.49	-29.41
Russell 2000	RUT	1682	-1.16	-6.44	-3.55	-25.07	-25.74
Dow Jones Ind.	DJI	29634	1.15	-3.85	-5.28	-18.45	-16.04
Commodities							
Crude Oil	CL1	86.31	-4.97	1.15	-15.54	14.29	4.79
Brent Crude	BRN00	92.49	-3.73	0.83	-12.39	18.80	10.03
Natural Gas	NG00	6.06	-7.19	-23.07	-17.53	68.77	21.48
Unleaded Gas	RB00	2.66	2.06	7.86	-18.24	19.90	7.28
Gold	GC00	1672.40	-0.20	-0.75	-2.04	-8.64	-5.24
Silver	SI00	18.75	-4.31	-4.19	0.67	-19.63	-19.18
Copper	HG00	3.44	0.31	-2.20	3.97	-22.69	-26.86
Corn	C00	689.25	-1.11	1.66	13.08	16.33	29.83
Wheat	W00	870.00	-6.80	4.97	7.77	13.02	18.27
Bloomberg Commodity Index	BCOM	113.56	-3.05	-2.73	0.08	14.51	8.43
Bitcoin	BTC	19481.42	1.81	0.95	-12.59	-57.56	-67.78



Source: TradingView

News Review

- [America's Oldest Bank, BNY Mellon, Begins Custodial Services for Bitcoin and Ethereum](#)
- [Mastercard Will Help Banks Offer Cryptocurrency Trading by Handling Regulatory Compliance & Security](#)
- [Google Partners With Coinbase to Accept Crypto Payments for Cloud Services](#)
- [Coinbase Wins Crypto License In Singapore As City-State Aims To Become Web3 Hub](#)
- [Crypto Services Firm Luxor Unveils Hashprice Derivative for Bitcoin Mining](#)
- [River Financial Offers Payment Gateway for Bitcoin's Multi-Asset Upgrade](#)
- [Tap-to-Pay Payment Cards, Using Bitcoin's Lightning Network, Come to El Salvador](#)
- [Stablecoin Issuer Tether Eliminates Commercial Paper From Reserves](#)
- [Leading NFT Exchange OpenSea Adds Avalanche Marketplace](#)
- [Digital Asset Custodian Copper in Midst of \\$196M Series C Funding Round](#)
- [DeFi Exchange Uniswap Raises \\$165 Million From a16z, Polychain](#)
- [Skype Co-Founder Leads \\$13M Investment in Liquid-Cooled Bitcoin Mining Tech](#)
- [Investing App Stash Raises \\$52.6M Weeks After Expanding Access to Cryptocurrencies](#)
- [FASB Settles on Fair-Value Accounting for Measuring Crypto Assets](#)

Key Takeaways

- Digital asset volatility has continued to sharply contract over the past few weeks
- Historically, volatility contractions have bred explosive volatility expansions
- Both Bitcoin and Ethereum are currently signaling a bearish bias on trend metrics

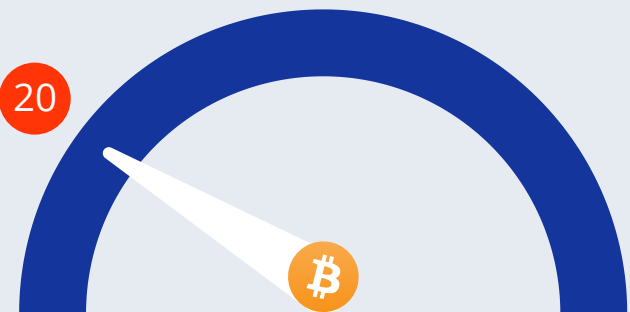
On-Chain Commentary

Bitcoin price volatility has continued to contract over the past few weeks, with rolling 30-day volatility now sitting at a multi-month low. Despite being known for its high volatility, Bitcoin is no stranger to periods of severe volatility contraction. Since 2013, Bitcoin has experienced six other periods of similar range bound activity with a spike in volatility following 6.5 weeks of contraction, on average. Currently, based on weekly Bollinger Bands, bias leans bearish as price continues to close below the neutral 20-week moving average (MA), now at \$21,000. A Bollinger Band breakout and resulting volatility expansion could lead to a downside price level of \$10,000 to \$13,500, the lower bounds of which would mark a -85% drawdown from the all-time high. Both the 2014 and 2018 bear markets found eventual bottoms within similar ranges.

Ethereum is also showing a similar significant decline in volatility with bearish bias on Bollinger Bands and a 20-week MA at \$1,430. If current price lows are breached, a retest of the \$800-\$1,000 summer low and psychological level are highly likely. Ethereum's Proof-of-Stake consensus mechanism is now maintained by 445,000 validators representing 14.3 million staked ETH. Although the network issuance can tip into deflationary territory thanks to a transaction fee burning mechanism, muted on-chain activity over the past few months has kept token burning and issuance mainly at par.

Bitcoin Fear and Greed Index

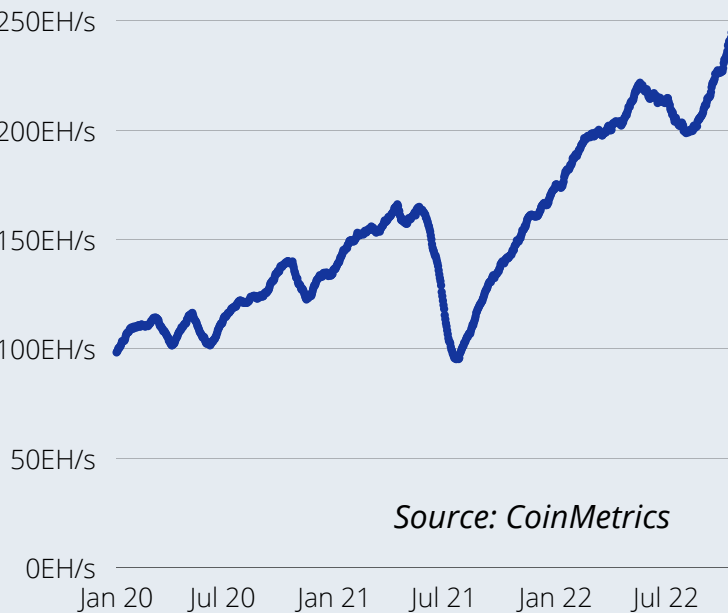
Multifactorial Market Sentiment Analysis



Last Week: 22 Last Month: 22

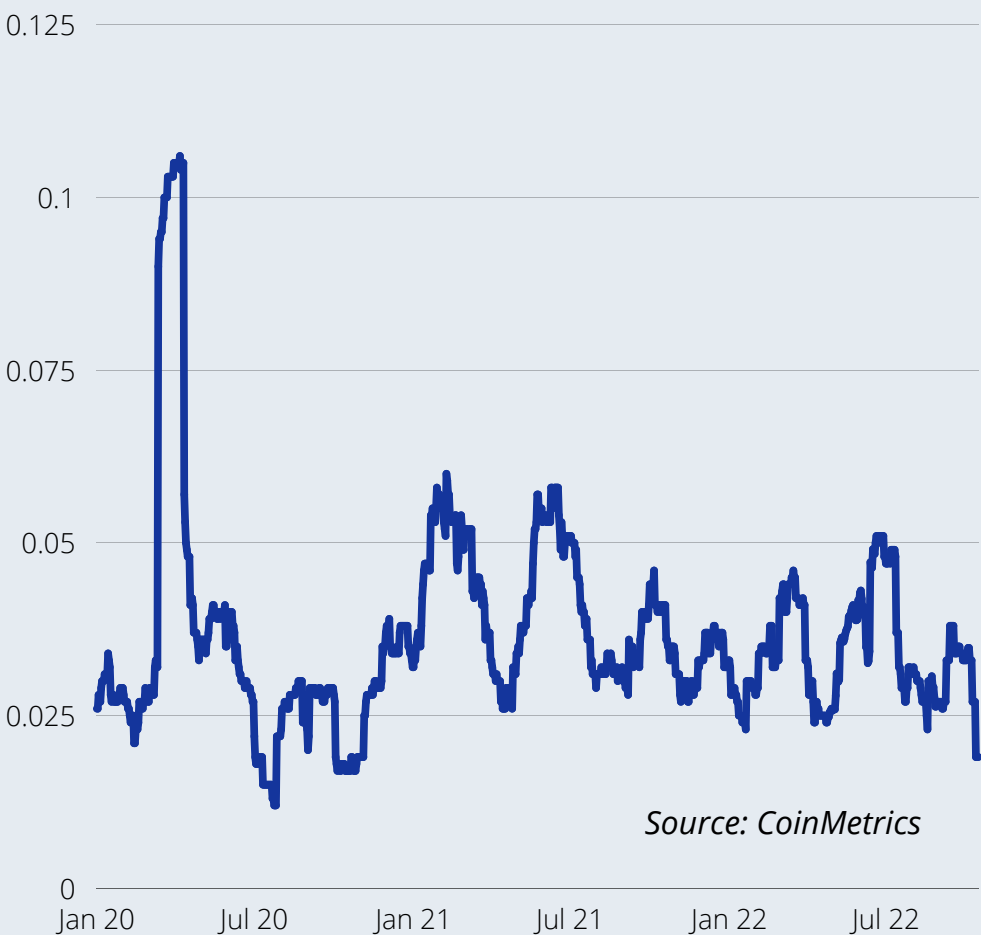
Source: Alternative.me

Bitcoin Monthly Average Hashrate



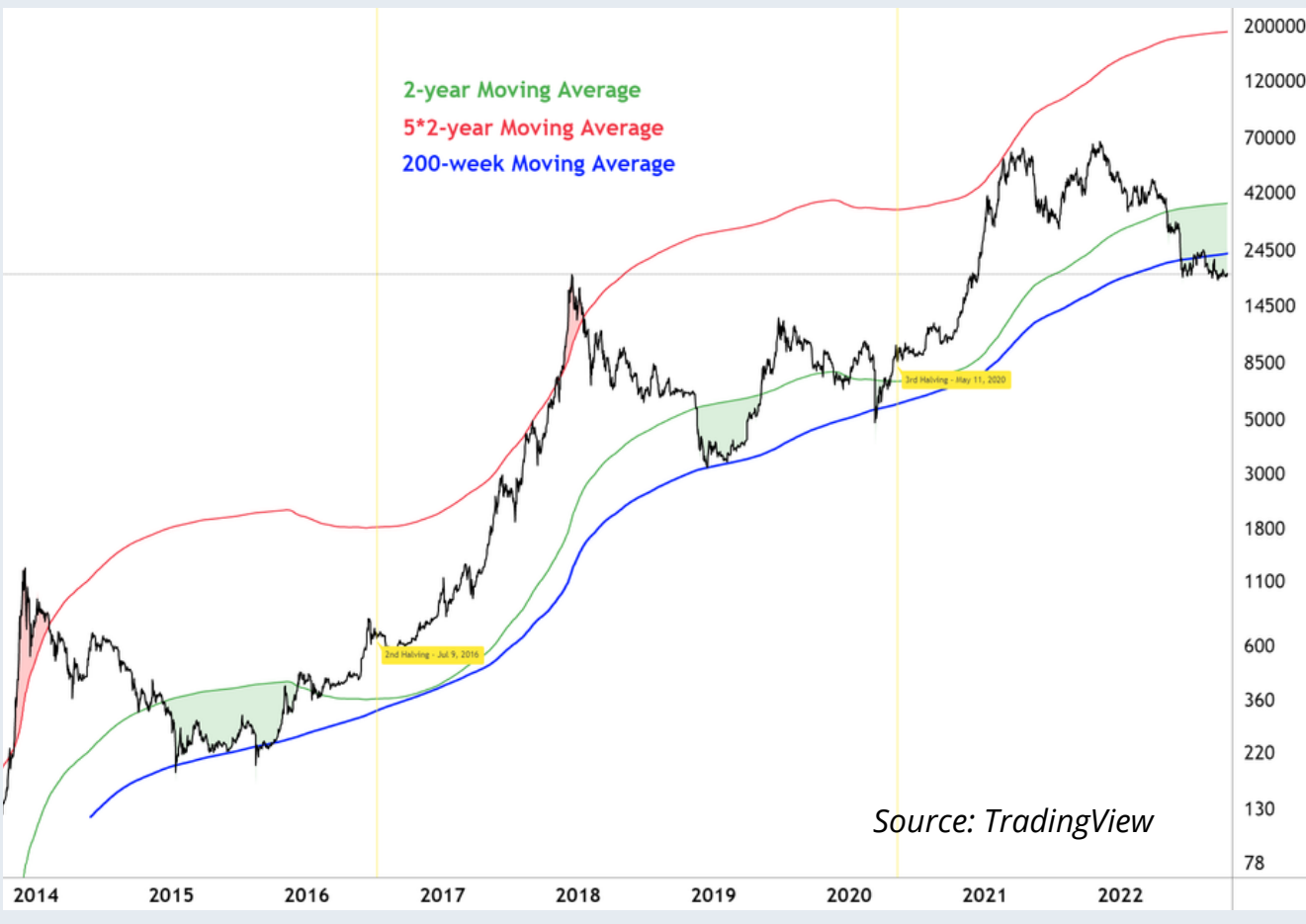
Source: CoinMetrics

Bitcoin 30-Day Rolling Volatility



Source: CoinMetrics

Bitcoin Moving Averages



Source: TradingView

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Past performance is not indicative of future results. Investments may be speculative, illiquid and there is a risk of total loss. There is no guarantee that any specific outcome will be achieved.

Key Takeaways

- Protocols continue to implement code and release improvements in bear market conditions
- Multiple liquid staking derivatives are important to maintain decentralization on Ethereum
- Ethereum scaling protocols Arbitrum and Optimism have seen significant user growth recently

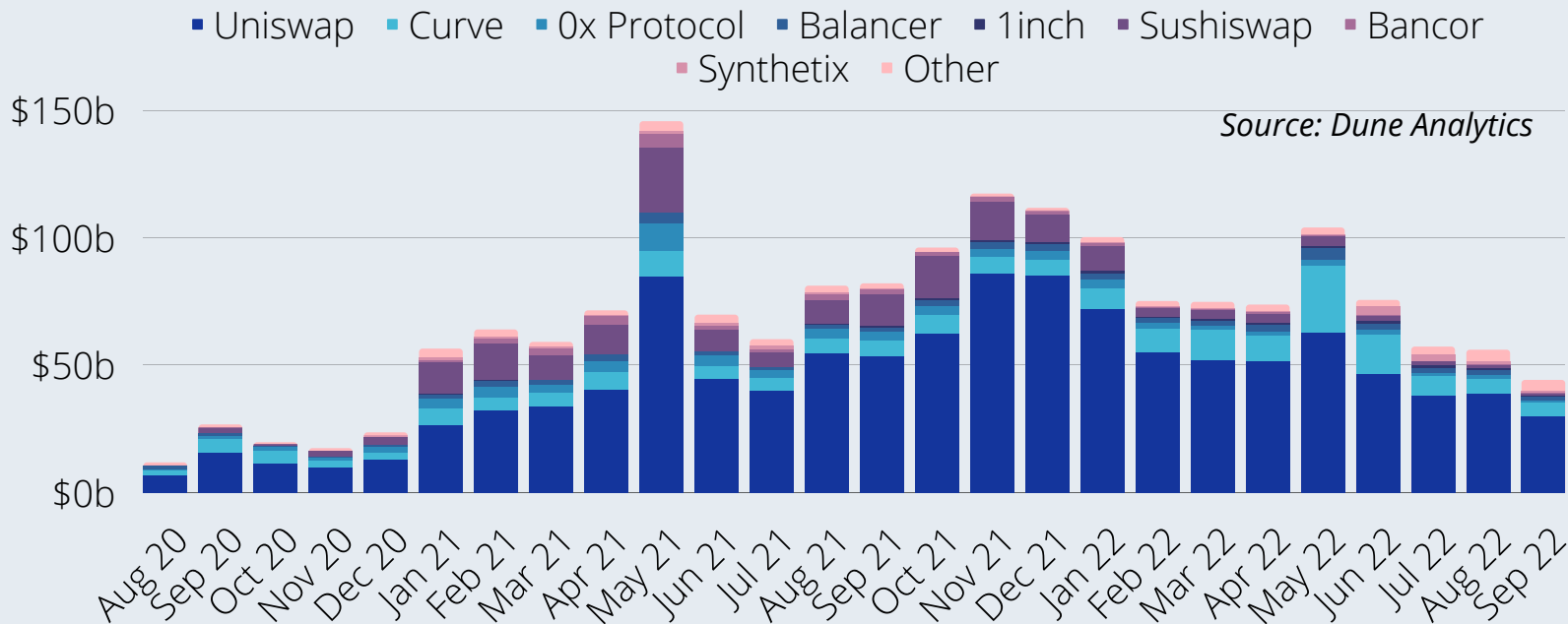
Decentralized Finance (DeFi) Commentary

Several DeFi-facing protocols and services have continued to build and expand throughout the bear market. Improved functionality and user experience will help encourage future adoption

Frax Finance, a protocol most well known for its partially algorithmic stablecoin, currently with over \$1.3 billion in market cap, will be launching an Ethereum liquid staking derivative (LSD) “frxETH” in the coming weeks. This LSD will compete with Lido, Rocketpool, and others in the liquid staking protocols area. Frax has plans to release code for the new initiative within the next two weeks. Many in the DeFi space welcome Frax as a new entrant to help diversify the liquid staking optionality, as Lido has accumulated more than 30% of the deposits into the Beacon chain as of earlier this year. Multiple staking venues help ensure decentralization is maintained within the Ethereum ecosystem.

Layer 2s also continue to build momentum. Both Arbitrum and Optimism set new all-time highs in transaction count in September. They are currently the largest Layer 2 scaling solutions on top of Ethereum with 50% and 30% market share, respectively. Momentum began building earlier this year when Optimism launched its own governance token and speculation is growing around the potential launch of an Arbitrum governance token. Arbitrum has recently completed a major infrastructure upgrade, “Arbitrum Nitro”, which theoretically increases throughput by 7-10x, decreases transaction costs, and increases other rollup compatibilities.

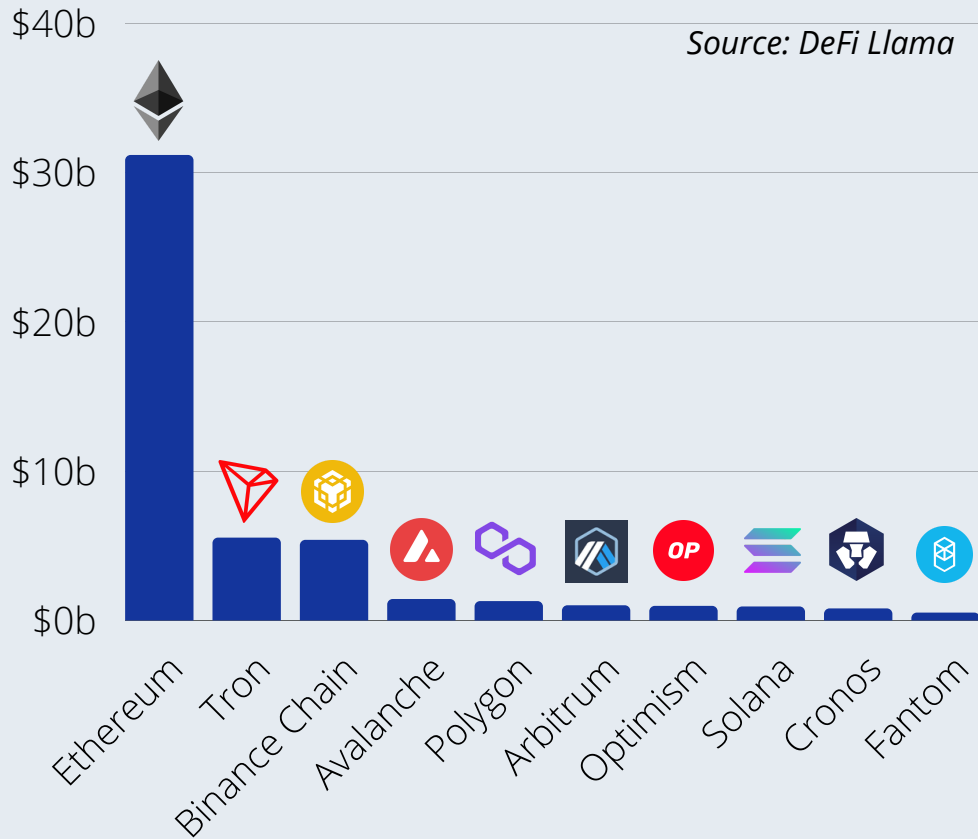
Decentralized Exchange (DEX) Volume



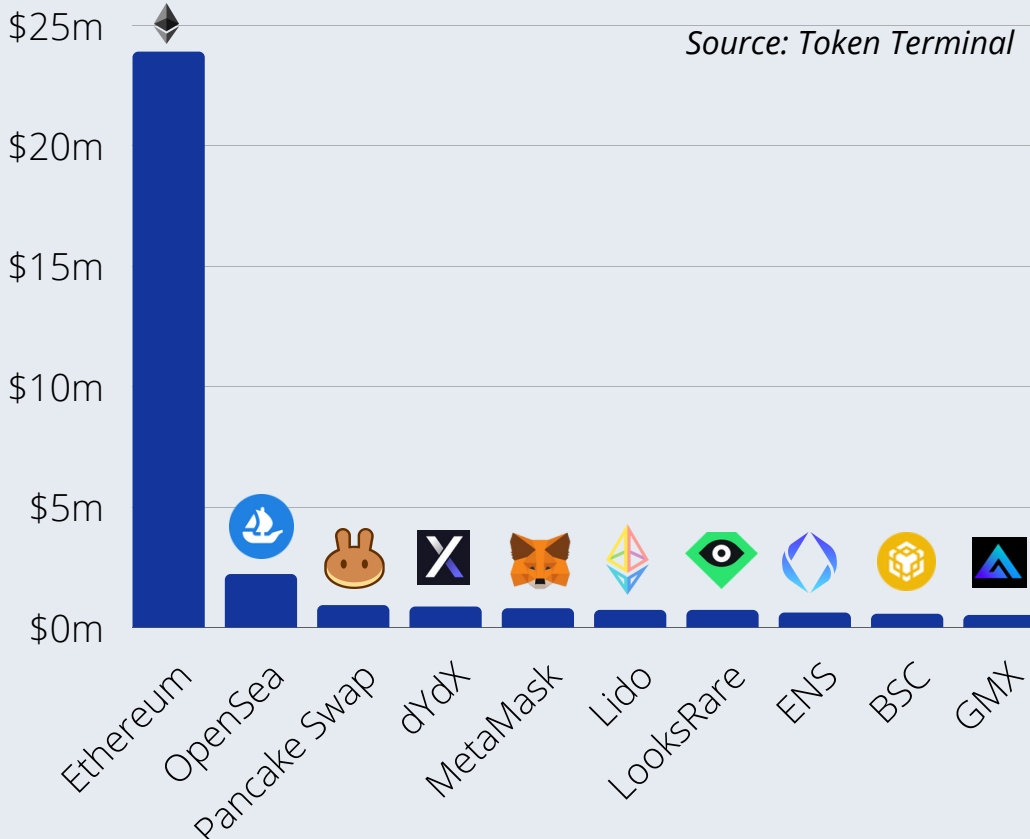
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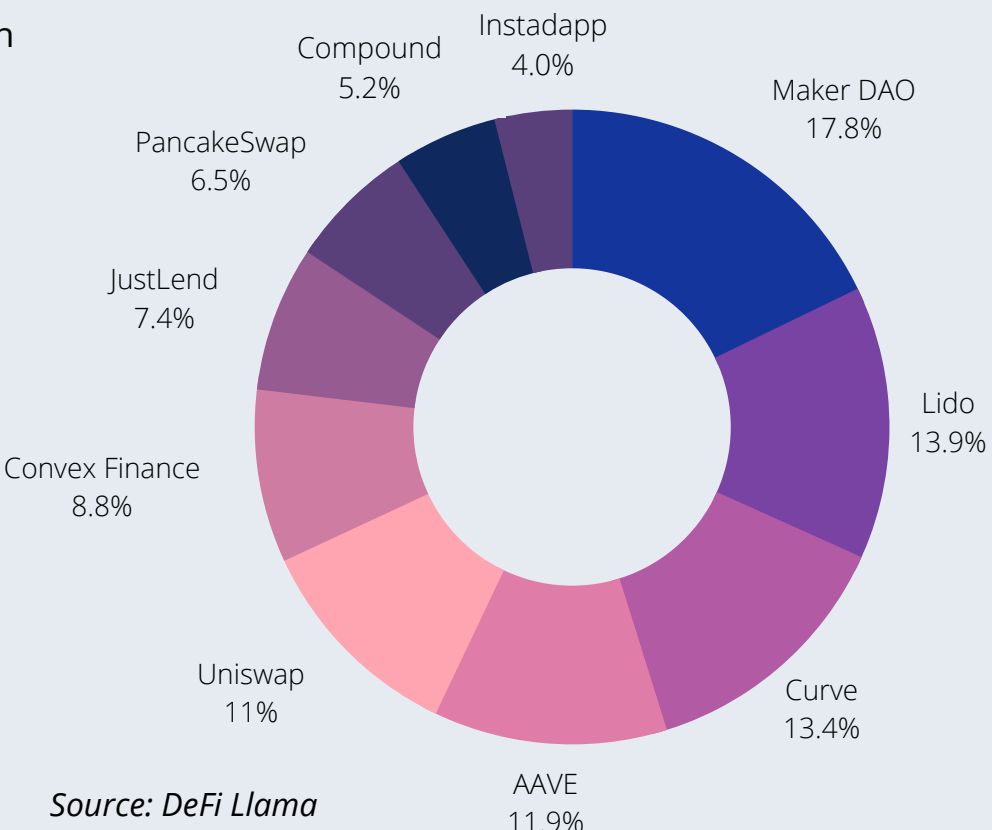
DeFi Total Value Locked, Top 10 Chains



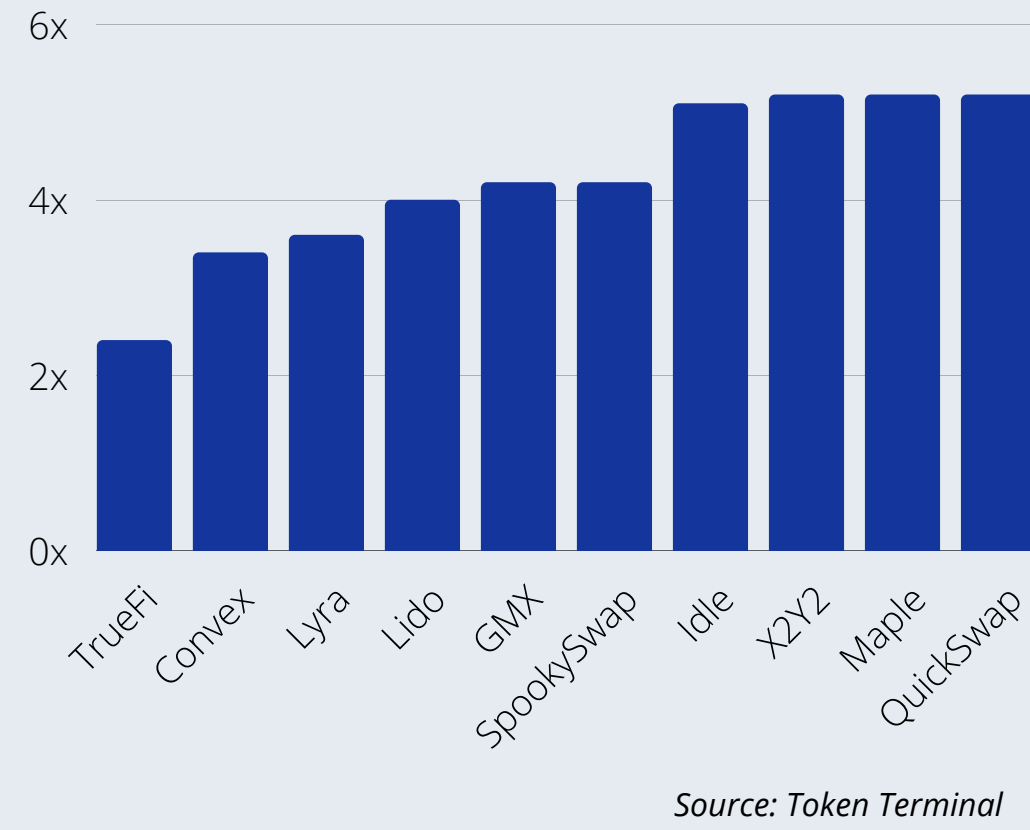
Top Protocol Revenue, Past Week



DeFi Total Value Locked, Top 10 Apps



Lowest Price to Fees Ratio, Past Week



Stablecoin Origins & Purpose

Stablecoins are a sector of cryptocurrencies which attempt to peg value to \$1, typically using an external reference, such as USD or EUR. The main types of stablecoins include; fiat-backed, crypto-backed, algorithmic, or hybrid collateralization.

Tether (USDT) was initially created in 2014 to act as a potential hedge against market volatility, as well as increasing the transferability and convertibility of fiat currencies to cryptocurrencies. Tether’s usage and supply grew substantially throughout the 2017 Bitcoin bull run, which significantly increased adoption of USDT trading pairs on crypto exchanges. As scrutiny increased over Tether’s reserves, competing projects like Circle’s USD Coin (USDC) arose with a focus on increased transparency. Today, most fiat-backed stablecoins, including Tether, release monthly reserve attestations.

Fiat-Backed

The two largest stablecoins by circulating supply, USDT and USDC, are both backed by USD reserves and/or USD equivalents held in third-party financial institutions. Issuing these types of stablecoins directly from the servicer also requires KYC/AML compliance and minimum capital requirements.

Crypto-Backed

Crypto-collateralized stablecoins require on-chain management with the use of smart contracts, which also allows for 100% transparency of reserves and collateralization levels. Most crypto-backed stablecoins do not have KYC/AML or minimum capital requirements for initialization but do require overcollateralization of loans to buffer against market volatility. If these loans fall below the required collateralization level, they are liquidated.

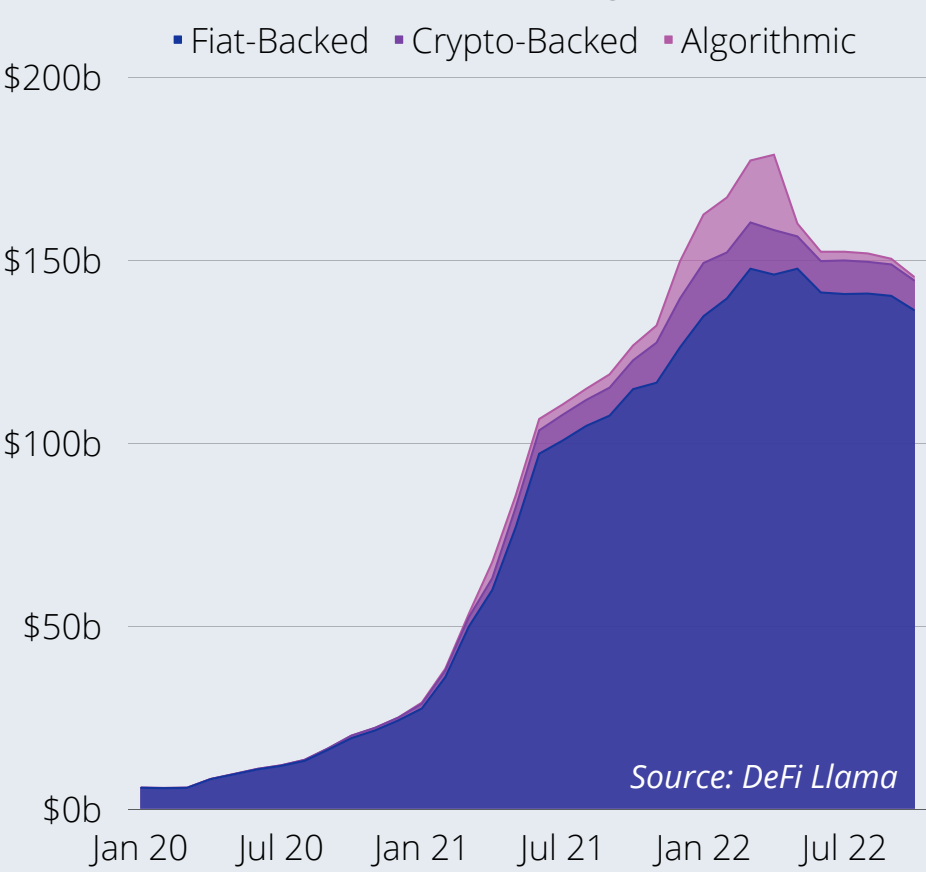
Algorithmic

Of all stablecoin types, algorithmic or seigniorage-style stablecoins have had the most difficulty maintaining a \$1 peg, historically. This stablecoin type does not require collateral and are managed on-chain via smart contracts. Algorithmic stablecoins *will* increase or decrease the circulating supply to maintain stablecoin value.

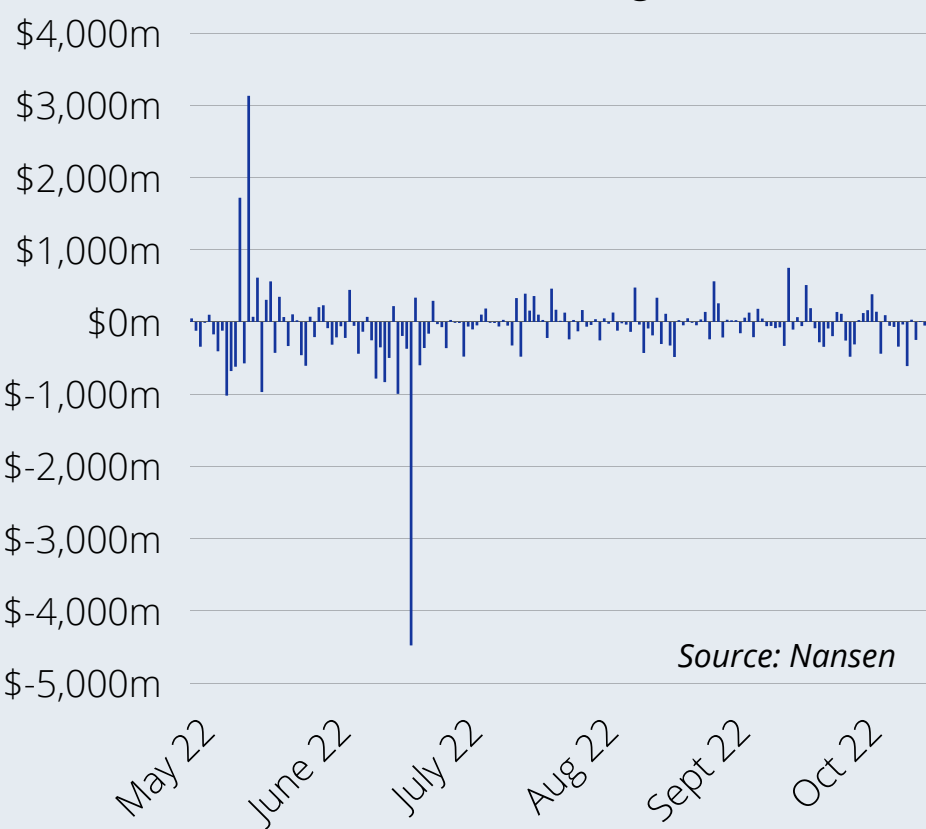
Tether Redemptions & Reserves


Tether experienced about \$19 billion in redemptions, approximately 20% from the peak, since the Terra and UST algorithmic stablecoin implosion in mid-May. Earlier this year, Tether saw increasing scrutiny regarding the components of it's reserve holdings, including a nearly 25% slice of commercial paper. Going forward, Tether will be replacing the MHA Cayman accounting firm with BDO Italia and will publish monthly attestations of stablecoin reserves. According to the latest attestation of reserves, commercial paper holdings have declined to 12% of the total reserves. Tether has said they plan to reduce these holdings to zero by the end of the year, as well as plans for a full audit through BDO Italia. As of September 30th, the Tether reserves now hold 58% US Treasury Bills, per Paolo Ardoino, Tether's CTO.






Stablecoin Circulating Supply







Stablecoin Net Exchange Flow



	Fiat-Backed	Ticker	Supply (\$, bn)	Launch	Chain
	Tether	USDT	68.43	Sept '14	Multi
	Circle	USDC	44.34	Sept '18	Multi
	Binance	BUSD	21.29	Sept '19	Multi
	Paxos	USDP	0.89	Sept '18	ETH, BSC
	TrueUSD	TUSD	0.87	Jan '18	Multi
	Gemini	GUSD	0.33	Sept '18	ETH
	Huobi	HUSD	0.21	Nov '18	ETH, SOL

Crypto-Backed					
	MakerDAO	DAI	6.00	Dec '17	Multi
	Abracadabra	MIM	1.81	May '21	Multi
	Liquity	LUSD	0.17	Apr '21	ETH
	Synthetix	sUSD	0.13	Dec '18	ETH, FTM
	mStable	mUSD	0.05	May '20	ETH

Algorithmic					
	Frax	FRAX	1.36	Dec '20	Multi
	Neutrino	USDN	0.11	Oct '19	Multi
	Fei USD	FEI	0.06	Dec '20	ETH
	TerraUSD	UST	0.00*	Sept '20	Multi



Weekly Market Review - October 17th, 2022

On-Chain Commentary, Decentralized Finance (DeFi) Commentary, Traditional Market Commentary: Source: Valkyrie Investments, Inc.

Coin Prices, Market Capitalizations, and Returns: Source: Valkyrie Investments, Inc., TradingView, Messari. All returns represent total return for stated period. Coin Logos: Source: cryptologos.cc

Annualized Issuance, Staking Yield, Volatility, and Sharpe Ratio: Source: Valkyrie Investments, Inc., Messari, StakingRewards.com. ETH staking rewards values are representative of the network post-Proof-of-Stake transition.

Bitcoin Fear and Greed Index Source: Valkyrie Investments, Inc., alternative.me and represents a multifactorial sentiment analysis index of volatility, market momentum and volume, social media, bitcoin market cap dominance, and Google trends

Bitcoin Monthly Average Hashrate, Bitcoin 30-Day Rolling Volatility: Source: Valkyrie Investments, Inc., CoinMetrics

Bitcoin Weekly Moving Averages: Source: Valkyrie Investments, Inc., TradingView - INDEX:BTCUSD

Stablecoin Origins & Purpose, Fiat-Backed, Crypto-Backed, Algorithmic, Tether Redemptions & Reserves: Valkyrie Investments, Inc., Tether Operations, CoinMetrics, Circle, and Paxos

Stablecoin Circulating Supply: Source: Valkyrie Investments, DeFi Llama - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Stablecoin Net Exchange Flow: Source: Valkyrie Investments, Inc., Nansen and represent wallet inflows and outflows of Tether, USD Coin, Binance USD, PAX, and Huobi USD through crypto exchanges, including but not limited to; Binance, Curve.fi, AnySwap, Crypto.com, Uniswap, Hop Protocol, OKEx, Kucoin, dYdX, Coinbase, Kraken, Huobi, FTX, Gemini, FTX US, CoinList, SushiSwap, Gate.io, Balancer, BitMEX, Bitfinex, Bittrex, Binance US, Bitstamp, BlockFi, Paxos, Celsius, Alameda OTC, Poloniex, HitBTC, Bancor, Kyber, and ShibaSwap.

List and examples shown in the Stablecoin table are non-exhaustive, intended for illustrative purposes only. Chain data sourced from CoinMarketCap. "Multi" description can include Ethereum, Solana, Binance Smart Chain, Algorand, Tron, Fantom, Polygon, Avalanche, Arbitrum, Secret, Terra, Moonriver, Velas, and Harmony. Coin Logos: Source: cryptologos.cc

DeFi Total Value Locked, Top 10 Chains, DeFi Total Value Locked: Source: Valkyrie Investments, DeFi Llama - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Top Protocol Revenue, Past Week, Lowest Price to Fees Ratio, Past Week: Source: Valkyrie Investments, Token Terminal - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Decentralized Exchange (DEX) Volume: Source: Valkyrie Investments, Dune Analytics - Defined as total reported volume for the specified DEX in the specified time period. "Other" category includes the following DEXs: airswap, Bancor Network, clipper, DDEX, DefiPlaza, DFX Finance, DODO, dYdX, Gnosis Protocol, IDEX, Indexed Finance, Kyber, LINKSWAP, Loopring, mStable, Oasis, PowerIndex, Shell, xSigma

"Indicies" prices and returns: Source: Valkyrie Investments, Inc., MarketWatch. "S&P 500" provided by Standard & Poor's and is a stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States, "Nasdaq 100" provided by NASDAQ OMX Group and includes 100 of the largest domestic and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization. "Russell 2000" provided by FTSE Russell and is a small-cap stock market index that makes up the smallest 2,000 stocks in the Russell 3000 Index. "Dow Jones Ind." provided by S&P Dow Jones Indices and is a price-weighted measurement stock market index of 30 prominent companies listed on stock exchanges in the United States. "Gold" provided by NYMEX - CME Group and is a continuous futures product. All returns represent total return for stated period.

"Commodities" prices and returns: Source: Valkyrie Investments, Inc., Wall Street Journal. Bloomberg Commodity Index provided by Bloomberg and tracks prices of futures contracts on physical commodities on the commodity markets. All returns represent total return for stated period.

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