

Key Takeaways

- Markets continue waiting for and reacting to various economic data prints
- Probabilities for a ≥75bp hike are significant at this week's FOMC meeting
- The 2/10 year treasury yield spread continues to hold near YTD lows

Traditional Market Commentary

What almost seems like an endless waiting then reacting game for the next economic indicator, investors now wait for the Fed's pending move at FOMC this week. Markets collapsed following the consumer price index year over year release of 8.3% last week, while lower than the previous print of 8.5%, still higher than the consensus forecast of 8.1%. Core CPI, excluding food and energy, rose year over year to 6.3% from 5.9%, higher than consensus at 6.1%.

Probabilities call for a 75 bp rise at this week’s meeting, with even more expected hikes as inflation in the US refuses to be tamed. November’s FOMC meeting carries expectations of another 75 bp hike. Notable change from last week was the rise of the terminal rate now calling for 4.25-4.5%, higher than the 4% level predicted early last week. Any chance of an ease next year now looks like a fall 2023 event instead of summer. This particular meeting is pivotal as it takes place just before the midterm elections the week after.

Preliminary earnings announced by FedEx Friday also painted a darker macro picture as the company pulled back growth expectations and announced cost-cutting measures resulting in weaker shipment volumes ahead. Pessimism drove equities lower with the S&P 500 last week down almost 5%, and down almost 19% year to date. The Dow Jones Industrial declined 1300 points Tuesday alone, while the Nasdaq Composite approached levels not seen since June, as the index is down almost 27% YTD.

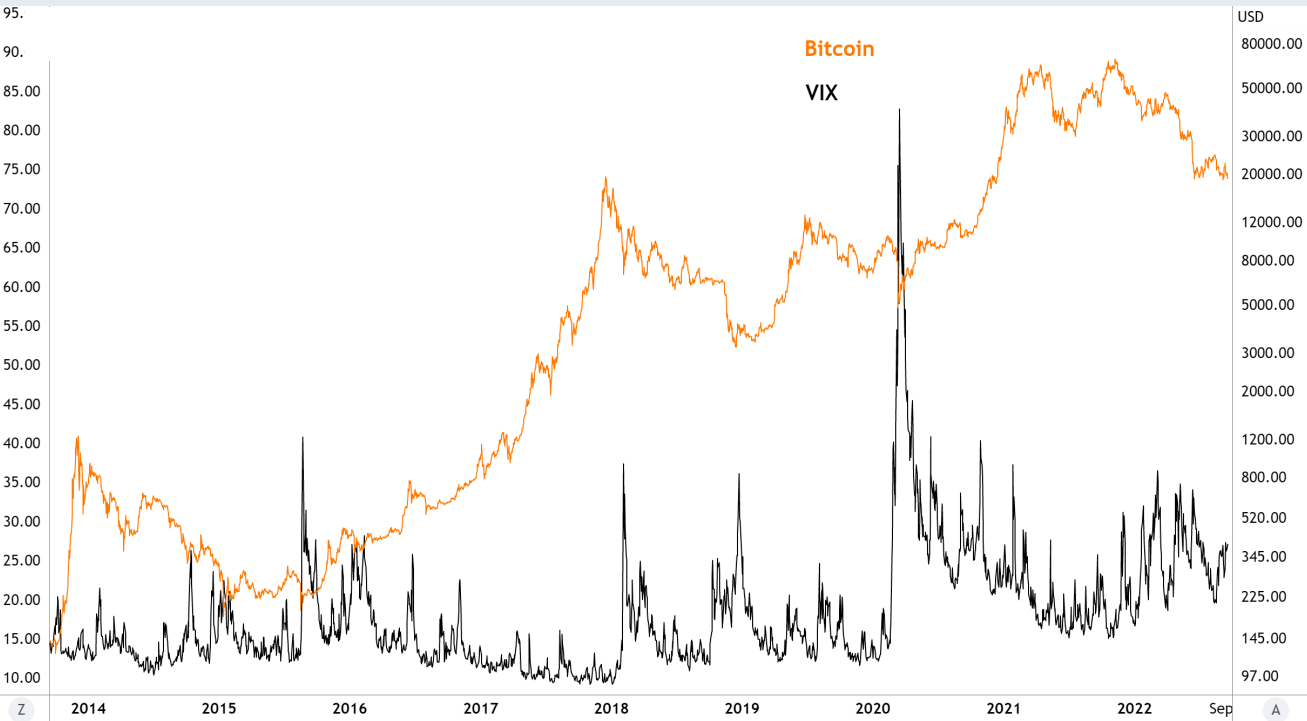
Interest rates are providing some type of transparency during these darker times as the changes in the yield curve remain fluid and volatile as ever. The 2-year treasury rose almost 30 bps last week, reaching 3.9% by Friday, the highest point since September 2007. The 10-year treasury remained steady at the 3.45% level after moving higher following the CPI news. This resulted in the 2/10 year spread declining towards the -45 bp level, approaching the YTD low of almost -50 bp reached early August. Weekly yield curve movement showed significant moves of 20-30 bp in the front end of the curve as traders priced in short term rate predictions.

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Indices	Ticker	Price (\$)	Returns (%)				
			1 week	1 month	3 month	YTD	1 year
S&P 500	SPX	3873	-4.77	-8.40	5.40	-18.73	-12.62
Nasdaq 100	NDX	11861	-5.77	-10.43	5.28	-27.32	-22.64
Russell 2000	RUT	1789	-4.50	-8.13	7.95	-19.91	-19.61
Dow Jones Ind.	DJI	30822	-4.13	-8.56	3.12	-15.18	-10.88
Commodities							
Crude Oil	CL1	82.57	-6.20	-8.92	-25.25	9.45	17.27
Brent Crude	BRN00	89.04	-5.54	-7.91	-22.04	14.24	19.95
Natural Gas	NG00	7.46	-10.98	-23.45	6.65	108.16	50.82
Unleaded Gas	RB00	2.36	-4.39	-18.19	-38.43	6.50	11.47
Gold	GC00	1673.50	-3.56	-4.33	-9.12	-8.57	-5.17
Silver	SI00	19.31	-2.35	2.28	-10.70	-17.30	-13.22
Copper	HG00	3.49	-3.75	-4.75	-13.22	-21.96	-15.63
Corn	C00	672.25	-3.17	7.09	-14.39	13.46	28.78
Wheat	W00	837.00	-2.48	6.36	-19.00	8.63	19.49
Bloomberg Commodity Index	BCOM	15.03	-2.94	-5.96	-9.26	16.06	17.99
Bitcoin	BTC	19008.31	-0.85	-3.96	-6.30	-58.34	-59.26



Source: TradingView

News Review

- White House Releases Comprehensive Framework for Responsible Development of Digital Assets
- ECB Selects External Companies for Joint Prototyping of User Interfaces for a Digital Euro
- US Senator Pat Toomey on the Bad State of Crypto Regulation
- CFTC Already Preparing to Be Crypto Watchdog, Behnam Tells US Senators
- A Stable Asset to Law Enforcement - Stablecoins Like USDT & USDC are Increasingly Useful for Fighting Crime
- Crypto Lender MakerDAO Turns to Staked Ether to Reduce USDC Influence
- Crypto Trade Group for Circle, Kraken Seeks Clout With PAC to Spread Cash Haul
- Disney CEO Lays Out Early Plan for Digital Future, Avoids Saying “Metaverse”
- NEAR Foundation Launches \$100 Million VC Fund for Lab and web3
- Blockchain Tool Developer Infura Plans to Launch Decentralized Protocol
- \$70M Art Collection at MoMA To Be Sold, Proceeds Could Fund NFT Buys
- Fortnite Developer Epic Games’ Marketplace Lists First NFT Game, Blankos Block Party
- BNB Chain to Collab with Google Cloud to Bolster Web3. Blockchain Startups

Key Takeaways

- Ethereum's protocol change occurred last week with no malfunctions
- A fee burning mechanism may push the ETH supply into deflationary territory
- Ethereum's Proof-of-Stake validators and rewards are also locked in the protocol

On-Chain Commentary

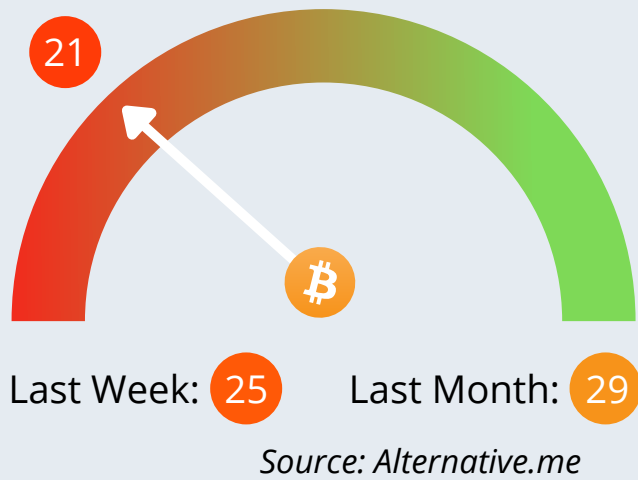
By all accounts, Ethereum’s consensus mechanism shift from Proof-of-Work to Proof-of-Stake occurred with no notable issues. Block times have normalized, with chain validation and transactional activity all migrating seamlessly. In regards to price action, most digital assets continue to experience significant correlations with traditional finance and associated macro headwinds.

With the Merge now in the rear view, Ethereum investors are now focused on whether or not issuance flips to a deflationary environment. Just over a year ago, Ethereum implemented EIP-1559, which simplified Ethereum’s transaction fee market and added a fee burning mechanism. As on-chain activity increases, the network will experience greater and greater deflationary pressures. Currently though, overall on-chain activity has declined significantly over the past few months.

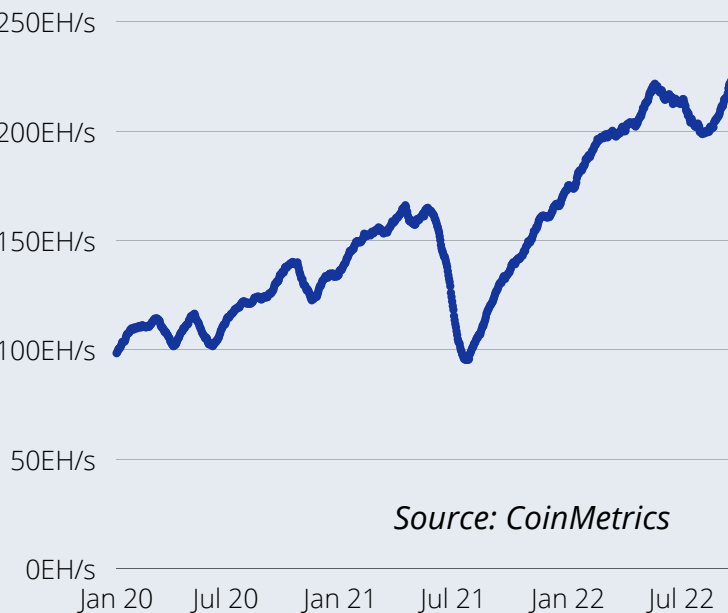
Chain validators will also act as an additional supply soaking mechanism. Entities or users with 32 Ethereum can participate as a validator to confirm transactions. Individuals with less than 32 Ethereum can also pool resources through a staking service to participate as a validator. Any related staked ETH and associated staking rewards will remain locked in the protocol until the the next major protocol update is written and implemented, which carries an estimated development time of 6 to 12 months.

Bitcoin Fear and Greed Index

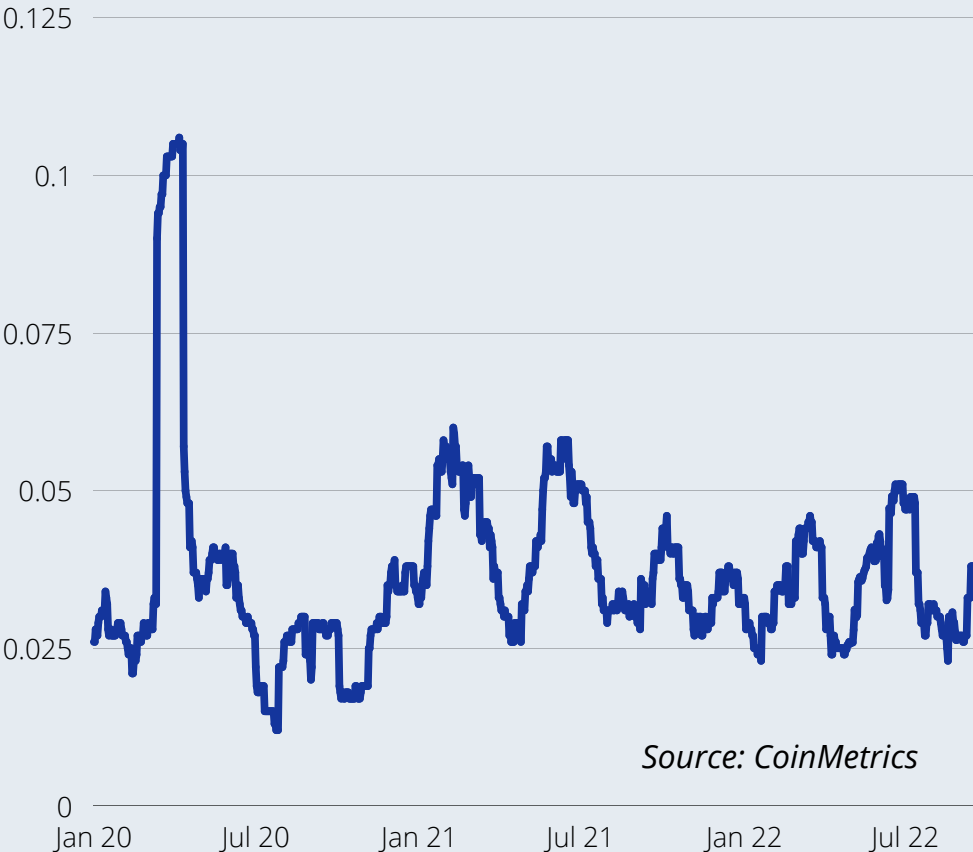
Multifactorial Market Sentiment Analysis



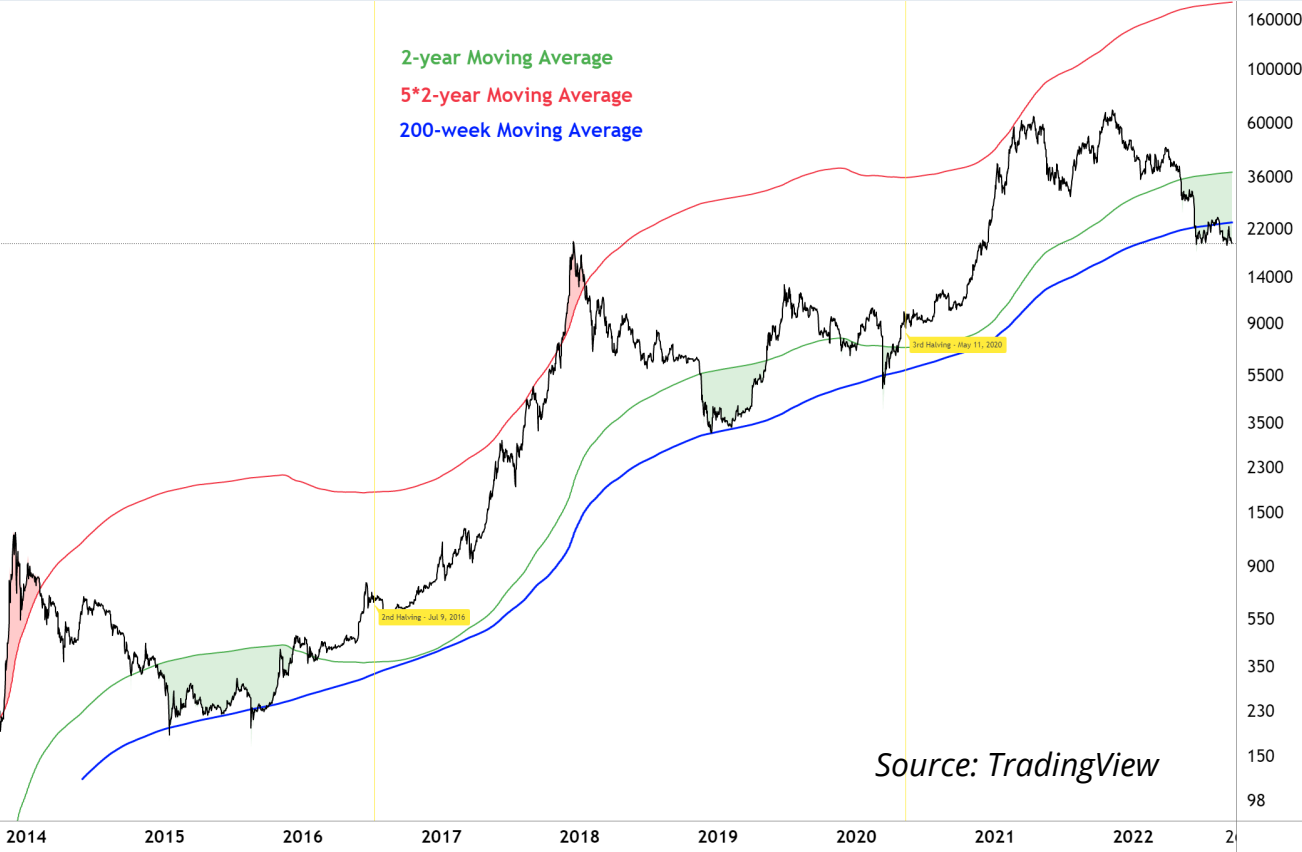
Bitcoin Monthly Average Hashrate



Bitcoin 30-Day Rolling Volatility



Bitcoin Moving Averages



Crypto	Ticker	Price (\$)	Returns (%)					M Cap (bn)	Annualized			
			1 week	1 month	3 month	YTD	1 year		Issuance (%)	Stake Yield (%)	Volatility	Sharpe
Bitcoin	BTC	19008.31	-0.85	-3.96	-6.30	-58.34	-59.26	368.80	1.77	N/A	0.68	-1.12
Ethereum	ETH	1333.94	1.78	-12.59	20.53	-63.05	-59.19	166.31	0.11	5.13	0.88	-0.70
Binance Coin	BNB	265.10	1.01	-3.69	24.48	-47.45	-34.16	43.40	0.00	4.55	0.77	-0.27
Solana	SOL	31.66	3.49	2.26	-8.56	-81.06	-78.94	11.40	4.58	5.88	1.10	-1.01
Polkadot	DOT	6.36	-0.56	-8.85	-18.48	-75.95	-81.05	7.17	7.30	13.93	1.06	-1.08
Polygon	MATIC	0.76	2.26	-7.45	92.50	-69.53	-41.45	6.73	5.64	13.61	1.24	0.09
Tron	TRX	0.06	-1.45	-5.55	-1.92	-20.38	-41.99	5.54	1.25	3.55	0.77	-0.34
Avalanche	AVAX	16.96	3.23	-9.92	1.04	-84.24	-75.40	5.10	4.93	8.55	1.22	-0.53
Cosmos	ATOM	15.54	8.52	34.77	134.16	-50.87	-64.06	4.56	12.78	17.87	1.27	-0.13
Near	NEAR	3.98	3.68	-7.23	19.10	-72.45	-60.36	3.19	4.76	10.61	1.43	0.11
Algorand	ALGO	0.31	8.39	9.99	-0.09	-80.86	-83.91	2.20	3.39	7.45	1.00	-1.39
Fantom	FTM	0.23	2.68	-15.85	-8.55	-89.78	-84.23	0.59	3.79	14.18	1.51	-0.39
Helium	HNT	4.44	15.69	-10.95	-56.71	-87.80	-76.72	0.58	Variable	6.16	1.39	-0.42
Zilliqa	ZIL	0.03	2.21	-10.91	-6.39	-56.60	-68.48	0.43	5.06	12.17	1.70	-0.10

Key Takeaways

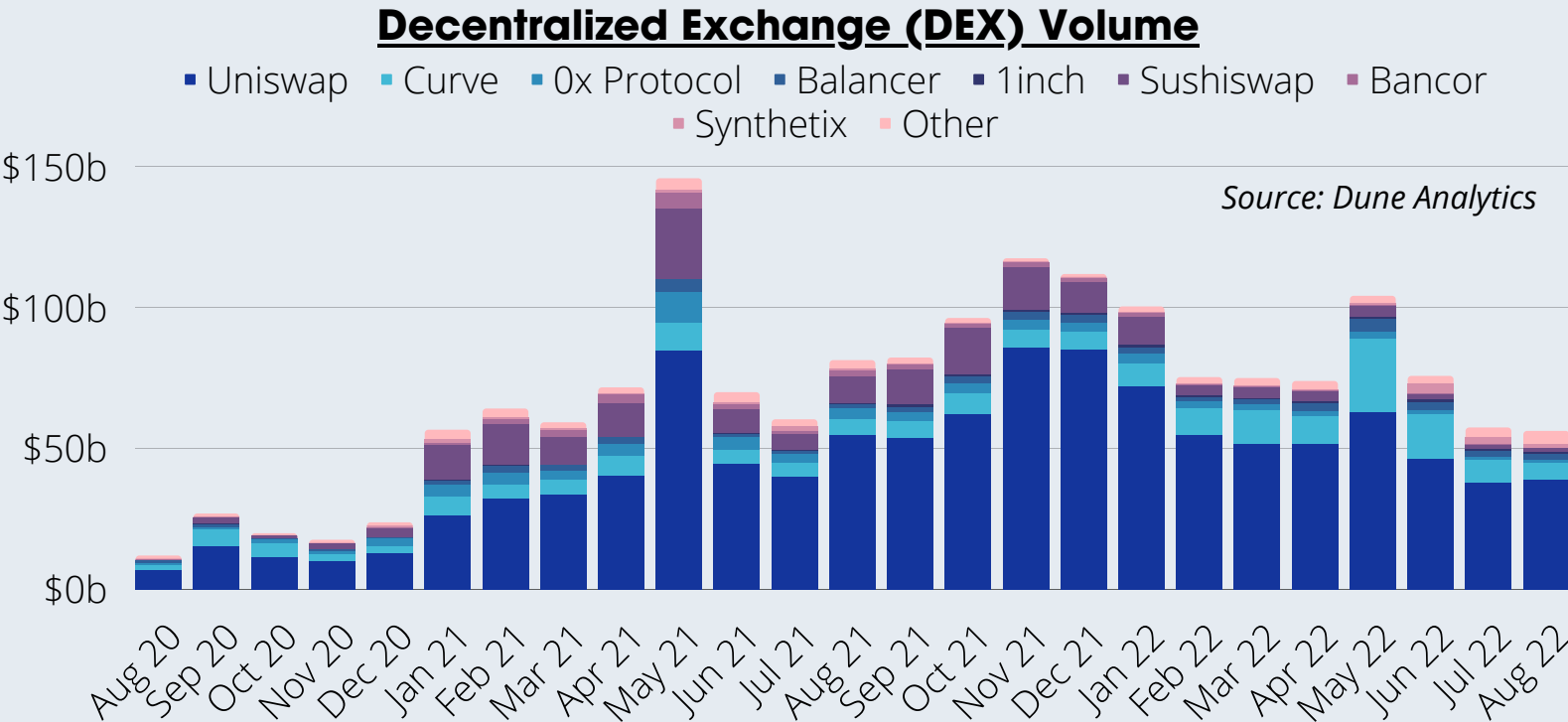
- The DeFi ecosystem experienced no issues after Ethereum's protocol change last week
- Decentralized applications have continued to seek out the most advantageous scaling solutions
- The popular on-chain derivatives exchange dYdX is in the process of migrating to a new L1

Decentralized Finance (DeFi) Commentary

As of this writing, major DeFi applications including but not limited to money markets and decentralized exchanges continue to operate as planned without any major glitches after Ethereum's Merge, or the transition from Proof-of-Work to Proof-of-Stake. Data oracles and token bridges also appear to be running smoothly.

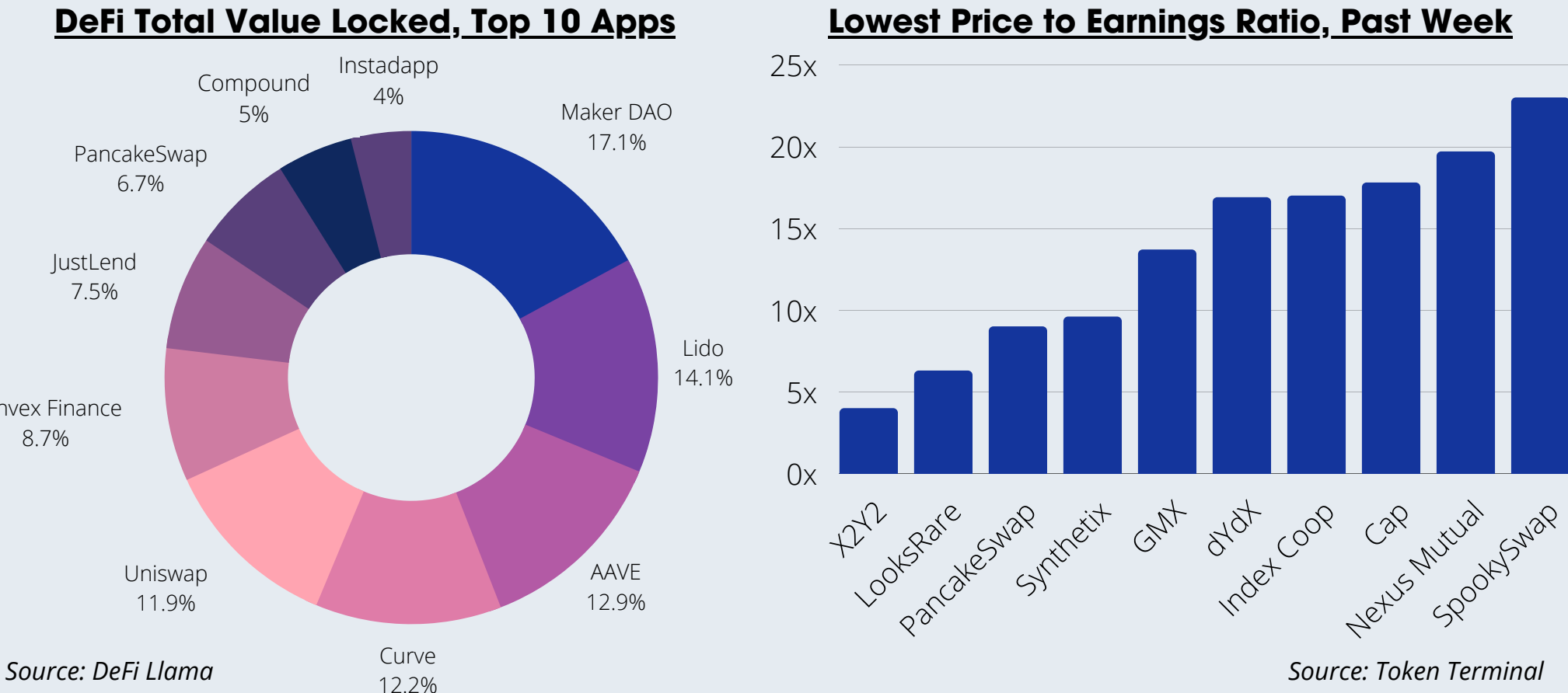
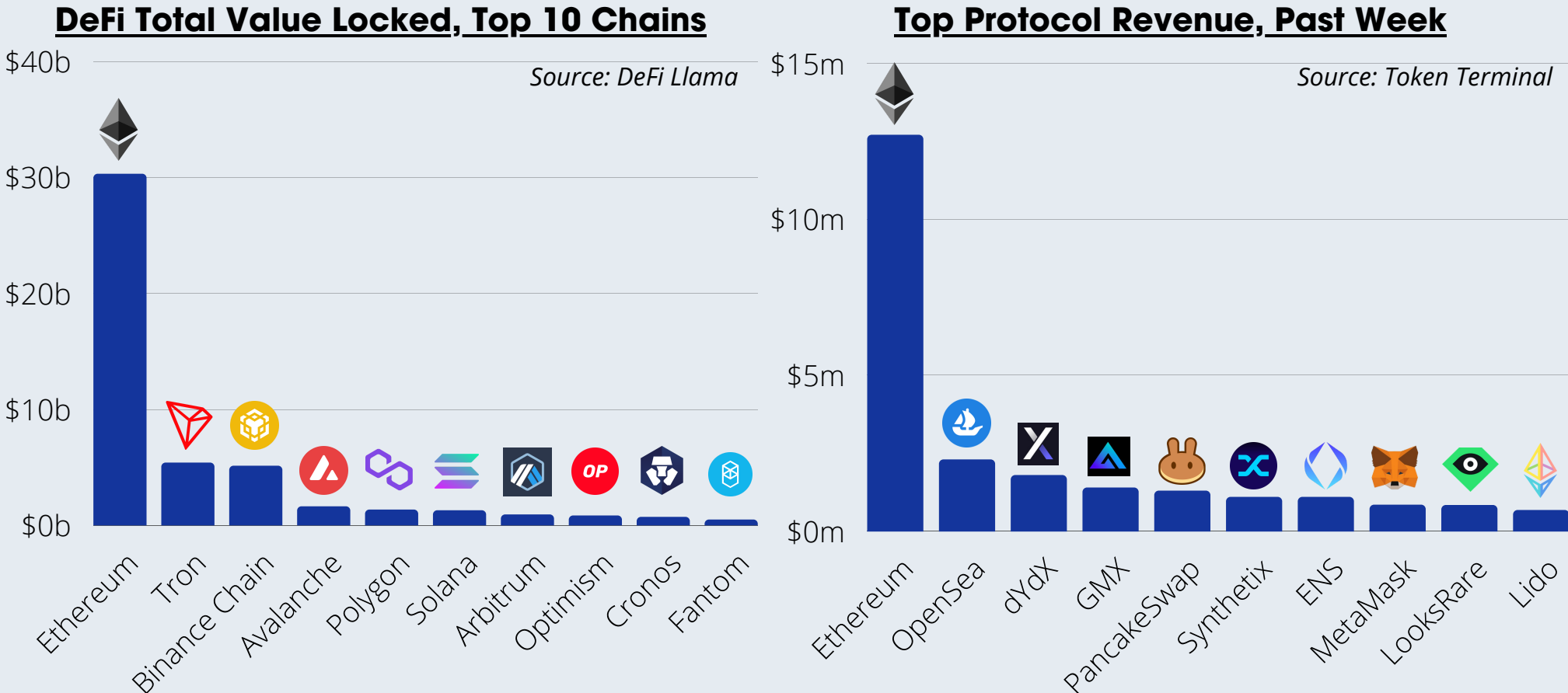
Nevertheless, out of necessity, projects previously associated solely in the Ethereum ecosystem have shifted focus to Ethereum alternatives or a multi-chain mindset. Earlier this year, the dYdX protocol, the largest on-chain perpetual futures exchange, announced a migration from an Ethereum Layer 2 to a Cosmos blockchain. Cosmos is a technology and ecosystem that allows projects to create a standalone blockchain with strong cross-chain capabilities.

According to the dYdX team, moving to a Cosmos blockchain will allow them to build the best fully decentralized protocol. Thus far, every L1 or L2 solution they have evaluated could not handle the throughput needed in order to properly run the orderbook and matching engine of the exchange on-chain. A purpose-built blockchain, dedicated to the newest version of the dYdX protocol, will theoretically allow for enhanced customizability and increased on-chain orderbook throughput. The team looks to be on track for a Q2 2023 mainnet launch.



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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.



Source: Token Terminal

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.

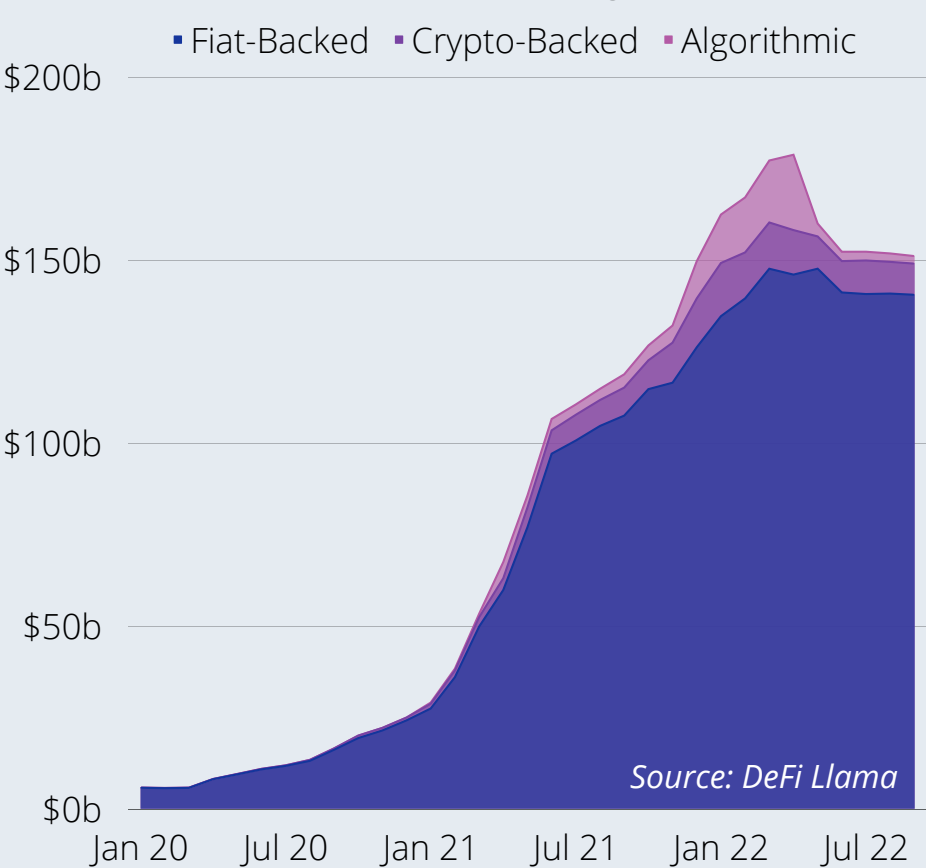
Algorithmic

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.

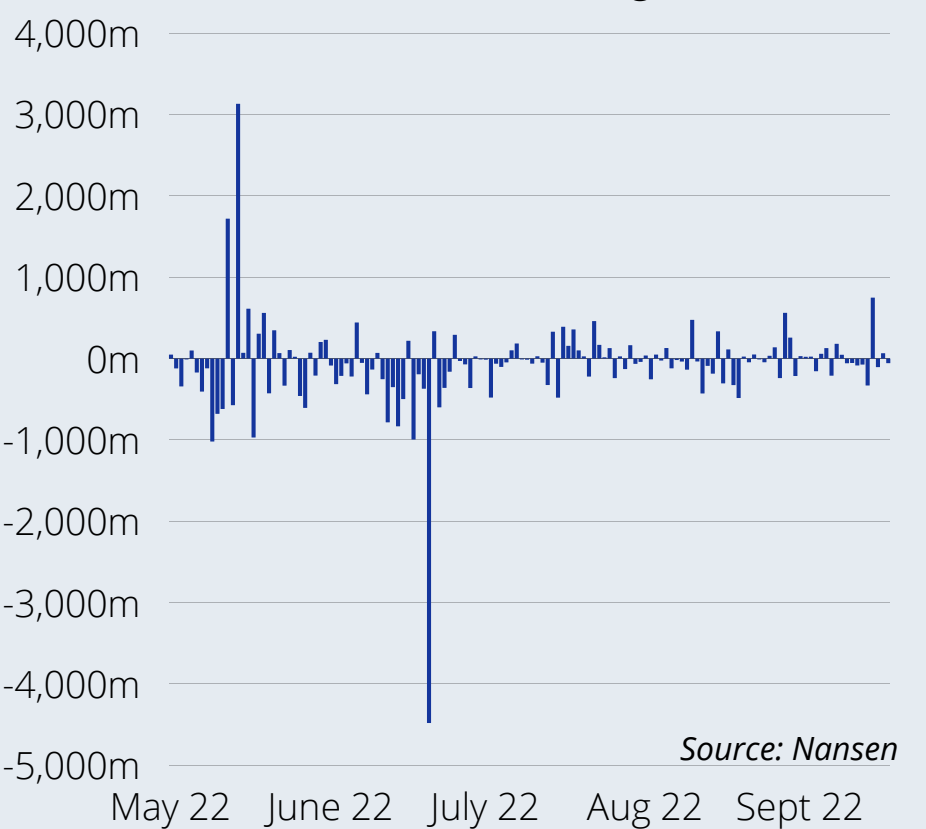
Tether Redemptions & Reserves

Tether has now 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.

Stablecoin Circulating Supply



Stablecoin Net Exchange Flow



	Fiat-Backed	Ticker	Supply (\$, bn)	Launch	Chain
	Tether	USDT	67.96	Sept '14	Multi
	Circle	USDC	49.37	Sept '18	Multi
	Binance	BUSD	20.68	Sept '19	Multi
	TrueUSD	TUSD	1.08	Jan '18	Multi
	Paxos	USDP	0.96	Sept '18	ETH, BSC
	Gemini	GUSD	0.31	Sept '18	ETH
	Huobi	HUSD	0.16	Nov '18	ETH, SOL

Crypto-Backed					
	MakerDAO	DAI	6.39	Dec '17	Multi
	Abracadabra	MIM	1.81	May '21	Multi
	Liquity	LUSD	0.17	Apr '21	ETH
	Synthetix	sUSD	0.14	Dec '18	ETH, FTM
	mStable	mUSD	0.05	May '20	ETH

Algorithmic					
	Frax	FRAX	1.36	Dec '20	Multi
	Neutrino	USDN	0.62	Oct '19	Multi
	Fei USD	FEI	0.09	Dec '20	ETH
	TerraUSD	UST	0.00*	Sept '20	Multi



Weekly Market Review - September 19th, 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 Earnings 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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