VALKYRIE

Weekly Market Review - September 13th, 2022

Key Takeaways

- Today's CPI print came in above expectations, also bringing volatility
- Probability for a \geq 75bp hike at next week's FOMC is now certain
- The 2/10 treasury yield curve inversion continues to deepen

Traditional Market Commentary

An updated consumer price index data was released Tuesday morning and surprised investors with higher than surveyed inflationary indications. This all but certified a 75 basis point move at the FOMC meeting next week. The CPI year over year metric declined to 8.3% from 8.5%, notably higher than the expected 8% but within the surveyed range of 7.9% to 8.3%. Core CPI rose higher than expected to 6.3% from 5.9%, with expectations being at 6.1%. Month over month CPI rose 0.1% from last month, again, higher than the survey which was indicating a decline of -0.1%. PPI will be released tomorrow with similar surveyed expectations of trending lower or unchanged, but investors may plan with a bit of caution looking ahead.

Investors took CPI news hard and equity markets dropped immediately with the S&P 500 declining over 100 points by midday. This follows a positive shortened holiday week with the index rising to the 4100 level Monday then shooting below 4000 this morning. Interest rates moved higher with the 10 year treasury jumping to the 3.45% level after being range-bound last week near the 3.3%. Front end of the yield curve rose 10 to 20 basis points from yesterday, with moves closer to 40 basis points higher from last week. Back end of the curve had more subtle moves mainly from Tuesday's activity. Unfortunately, the 2/10 treasury yield spread dove deeper into more recessionary indicative territory. The spread is currently approaching the -35 basis point level after improving for much of the month.

CPI data will reverberate through world markets as growth expectations will tighten especially in Europe where the European Central Bank just raised rates last week. Inflation indications are comparably worse and could see a much more aggressive stance to bring down to more comfortable levels. Here in the US, while inflation remains a stubborn issue to deal with, the labor market and corporate balance sheets remain somewhat resilient, which could drive the Fed to a more prolonged rate hike strategy than desired. Investors may have to brace for more volatility, especially with midterms quickly approaching.

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Returns **Ticker** Indices Price (\$) 1 week 1 month 3 mont S&P 500 SPX 4067 3.65 -4.97 4.27 Nasdaq 100 NDX 12588 4.05 -7.21 6.38 **Russell 2000** RUT 1882 4.04 -6.63 4.59 DII 32151 2.66 -4.77 2.42 **Dow Jones Ind.** Commodities CL1 88.28 1.18 0.48 -27.05 **Crude Oil** BRN00 **Brent Crude** 94.53 -0.74 1.13 -22.74 **Natural Gas NG00** 7.91 -11.04 -10.13 -8.62 **Unleaded Gas RB00** 2.46 0.09 -15.90 -38.75 GC00 1739.80 1.00 -3.09 -4.42 Gold Silver SI00 19.55 9.18 -3.34 -6.99 **HG00** 5.75 Copper 3.59 -0.21 -14.37 Corn C00 680.25 2.41 8.49 -11.19 -18.94 W00 865.50 6.95 8.29 Wheat Bloomberg Commodity BCOM 119.32 0.18 -3.16 -11.90 Index 2.2 11.27 -0.68 **Bitcoin** BTC 22111.07



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; (%)		
th	YTD	1 year
	-14.66	-8.77
	-22.87	-18.47
	-16.14 -11.52	-15.47 -7.10
	11.52	7.10
5	17.00	25.00
4	21.29	28.32
2	120.65	52.67
5	10.95	13.68
2	-4.95 -16.29	-3.08
, 7	-16.29	-17.62
, 9	14.81	32.47
4	12.37	25.98
0	20.31	22.87
3	-51.72	-51.53
	51172	01100
	in M	70000.00
٨	M. M. M.	40000.00
M		24000.00
Jun C		14000.00
		8000.00
		4000.00
		2400.00
	I	1400.00
		800.00
VM/W	M L M	450.00
. v	"WWWW/W	155.00
		95.00
202	2022	A
Sou	urce: Trad	ingView

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Key Takeaways

- Ethereum's long awaited consensus mechanism shift will occur this week
- Staked ETH and associated staking rewards will remain locked for 6-12 months
- Bitcoin miners continue to scale as they seek and source cheap energy in the US

On-Chain Commentary

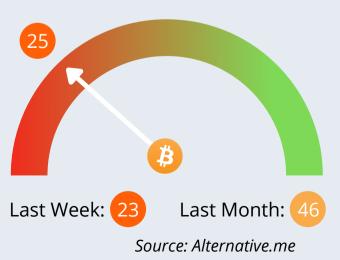
After years in the making, Ethereum's Proof-of-Work to Proof-of-Stake transition is set to finally occur around Thursday this week. Despite increasing centralization concerns related to a small quantity of staking services holding the lion's share of staked ETH, market sentiment for the protocol change remains higher than ever. Referred to as the "triple halving", Ethereum's emissions schedule is set to decline dramatically from approximately 4% to nearly 0%. Additionally, the chain may experience periods of deflationary pressures due to the fee burning mechanism. Any related staked ETH and associated staking rewards will remain locked in the protocol until the code to unlock them is written and added to the protocol, which carries an estimated development time of 6 to 12 months. The jury also remains out on how the DeFi ecosystem will adjust to a competing revenue model, or if staked ETH will be ingrained within DeFi to further enhance yields.

Conversely, Bitcoin will likely remain Proof-of-Work forever, with a specific associated monetary policy. The Bitcoin network confirms transactions roughly every 10 minutes with a 50% decline in issuance roughly every four years. Hash rate for the chain reached a new all-time high this week, despite falling Bitcoin prices over the past few months. A signal suggesting miners continue to build out previously planned and paid for infrastructure, are able to source cheap electricity, and remain confident in the longer term prospects of profitability.

0EH/s

Bitcoin Fear and Greed Index

Multifactorial Market Sentiment Analysis





Jan 20 Jul 20 Jan 21 Jul 21 Jan 22 Jul 22

0.125

0.1

Jan 20

Jul 20

Jan 21

Jul 21

					Returns	(%)				Annualized		
Crypto	Ticker	Price (\$)	1 week	1 month	3 month	YTD	1 year	M Cap (bn)	Issuance (%)	Stake Yield (%)	Volatility	Sharpe
Bitcoin	BTC	19901.42	-0.76	-1.00	-36.19	-57.04	-62.33	380.01	1.77	N/A	0.68	-1.08
🔶 Ethereum	ETH	1654.87	5.27	6.91	-8.26	-54.77	-57.68	203.26	4.13*	N/A*	0.88	-0.63
🞯 Binance Coin	BNB	281.13	0.65	0.54	-3.07	-45.15	-43.43	45.30	0.00	4.55	0.78	-0.42
Solana	SOL	32.86	2.22	4.35	-16.40	-80.67	-80.00	11.49	4.58	5.88	1.12	-0.78
Polkadot	DOT	7.54	2.62	7.57	-17.96	-71.64	-77.99	8.42	7.30	13.93	1.09	-0.75
🛇 Polygon	MATIC	0.90	-0.78	6.73	44.16	-64.86	-46.01	7.76	5.64	13.61	1.25	0.06
Avalanche	AVAX	19.94	4.72	4.01	-18.92	-81.82	-57.75	5.86	4.93	8.55	1.28	-0.05
🕅 Tron	TRX	0.06	0.2	0.26	-22.03	-15.48	-38.63	5.89	1.25	3.55	0.83	-0.15
Cosmos	ATOM	12.58	-4.68	5.14	35.40	-61.70	-50.51	3.56	12.78	17.87	1.34	0.22
Near	NEAR	4.39	4.43	1.33	-14.66	-69.92	-26.79	3.44	4.76	10.61	1.50	0.50
Algorand	ALGO	0.30	-3.5	4.48	-24.32	-81.82	-79.35	2.08	3.39	7.45	1.20	-0.53
🔞 Fantom	FTM	0.27	-2.12	-2.09	-23.67	-88.12	-80.82	0.68	3.79	14.18	1.54	-0.10
🧭 Helium	HNT	3.80	-14.7	-28.76	-64.23	-90.24	-84.87	0.46	Variable	6.16	1.23	-0.80
Zilliqa	ZIL	0.04	-1.28	-0.42	-26.88	-51.48	-72.36	0.48	5.06	12.17	1.71	-0.07

Bitcoin 30-Day Rolling Volatility

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Jan 22

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Bitcoin Moving Averages



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Key Takeaways

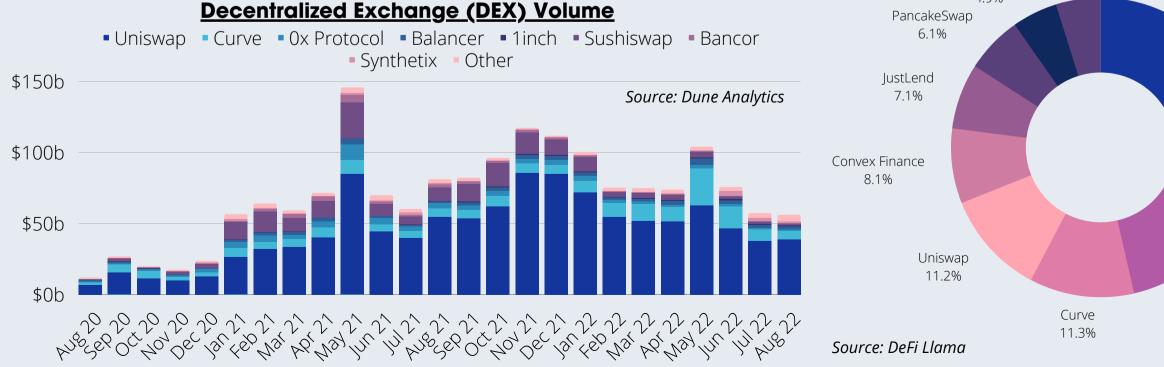
- The DeFi ecosystem has increasingly focused on market-driven, yield-generating opportunities
- Both Aave and Curve have announced plans to introduce their own crypto-backed stablecoins
- These new stablecoins would function similar to MakerDAO and Dai, launched in Dec 2017

Decentralized Finance (DeFi) Commentary

Over the past few months, communities have encouraged protocols to focus on potential yieldgenerating avenues and avoidance of centralized systems. Overcollateralized, crypto-backed, nonalgorithmic stablecoins are one such medium, similar to the MakerDAO and Dai functionality. Recently, both Aave and Curve have moved forward with plans for similar products.

Aave, the largest money market DeFi application, passed the "Greenlight for GHO" community governance proposal. GHO, Aave's new stablecoin, will soon have the ability to be minted against a diversified basket of crypto assets. Borrowers of GHO will continue earning interest on the supplied collateral used to mint the new stablecoin. All of the GHO interest payments will be paid back to the DAO treasury and many expect the offering will be a major source of revenue for the DAO.

Curve, one of the largest decentralized exchanges, published the smart contract code for their potential new stablecoin named crvUSD. Curve has the largest total value locked of any decentralized exchange and provides users low fee swaps on stablecoins for minimal slippage. After a code review, a community vote for the stablecoin implementation will likely take place over the next few weeks. Both Aave and Curve would use loans governed by smart contracts, requiring specific loan to value requirements and liquidation ratios, protect the overall health and solvency of the entire system.



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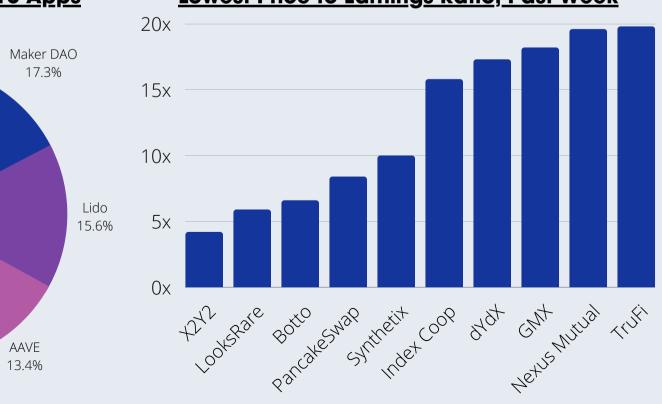


Compound

4.9%

Instadapp

4.8%



Source: Token Terminal

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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, \$200b 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 cryptobacked stablecoins do not have KYC/AML or minimum capital requirements for initialization but do require overcollaterization of loans to buffer against market volatility. If these loans fall below the required collaterization level, they are liquidated.

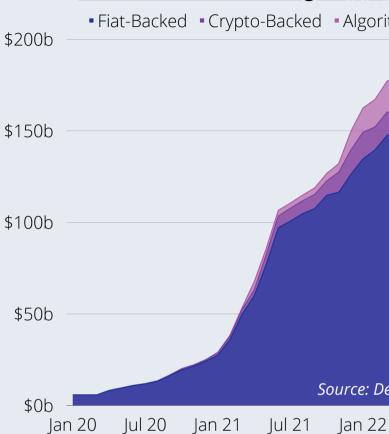
<u>Algorithmic</u>

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 -4,000m the year, as well as plans for a full audit through BDO Italia.

Stablecoin Circulating Supply





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	Fiat-Backed	Ticker	Supply (\$, bn)	Launch	Chain
nic	Tether	USDT	67.74	Sept '14	Multi
	(ircle	USDC	50.88	Sept '18	Multi
	Binance	BUSD	20.06	Sept '19	Multi
	TrueUSD	TUSD	1.06	Jan '18	Multi
	O Paxos	USDP	0.96	Sept '18	ETH, BSC
	Gemini	GUSD	0.36	Sept '18	ETH
	Huobi	HUSD	0.16	Nov '18	ETH, SOL
Llama	Crypto-Backed				
Jul 22	B MakerDAO	DAI	6.43	Dec '17	Multi
	🚹 Abracadabra	MIM	1.81	May '21	Multi
	Liquity	LUSD	0.17	Apr '21	ETH
	(s) Synthetix	sUSD	0.14	Dec '18	ETH, FTM
	s mStable	mUSD	0.05	May '20	ETH
h					
	Algorithmic				
	Frax	- FRAX	1.47	Dec '20	Multi
			0.65	Oct '19	Multi
	(D) Neutrino	USDN	0.65	OLL 19	Wulti
lansen	Neutrino Fei USD	USDN FEI	0.65	Dec '20	ETH

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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's EIP-1559 token burn and ETH-2 staking not included.

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

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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, "Nasdag 100" provided by NASDAQ OMX Group and includes 100 of the largest domestic and international non-financial companies listed on the Nasdag 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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