<u>Key Takeaways</u>

- Large liquidations & related forced selling of lending collateral has abated
- Near-term accumulation price structures have allowed for price reversals

On-Chain Commentary

The forced digital asset selling associated with various crypto lenders and entities appears to have abated for the time being. Celsius, Voyager, and Three Arrows Capital have all filed for Chapter 11 bankruptcy proceedings with financial documents being released to the public. Now the potential multi-year battle of repaying secured and unsecured creditors has begun.

Last week, both Bitcoin and Ethereum established accumulation price structures near the key psychological levels of \$20,000 and \$1,000, respectively. On a technical basis, the 200-week moving average and previous price all-time highs have also acted as accumulation areas in a bear market. Near-term upside resistance for Bitcoin and Ethereum, based on 50% retracements of recent highs and lows, stands at \$25,000 and \$1,500, respectively.

Ethereum's outsized performance last week may also be attributed to further milestone progress on the eventual Proof-of-Work to Proof-of-Stake protocol shift, potentially coming later this year. After the update, unlocked issuance on Ethereum will diminish significantly until staking rewards are released on the network. The Polygon blockchain has also shown a strong reversal from price lows over the past week, as Web3 use cases on Reddit's NFT marketplace and ties to Disney's accelerator program were announced.

Bitcoin Fear and Greed Index

Please see important disclosures on last page.

Weekly Market Review - July 18th, 2022

				Returns (%)				Annualized					
	Crypto	Ticker	Price (\$)	1 week	1 month	3 month	YTD	1 year	M Cap (bn)	Issuance (%)	Stake Yield (%)	Volatility	Sharpe
B	Bitcoin	BTC	21828.51	6.94	11.19	-45.55	-52.84	-30.09	424.36	1.77	N/A	0.68	-0.27
🔶 Et	hereum	ETH	1441.73	10.99	38.68	-51.44	-60.00	-21.54	180.45	4.13*	N/A*	0.85	-0.02
🎯 Bi	nance Coin	BNB	257.33	5.33	18.81	-37.43	-49.71	-13.66	42.60	0.00	5.06	0.80	0.05
= s	Solana	SOL	41.03	8.40	24.11	-59.11	-75.74	56.90	14.46	4.11	5.44	1.21	0.91
PC	olkadot	DOT	7.36	9.59	7.32	-58.29	-72.47	-40.10	7.48	8.20	14.83	1.12	0.08
℃ P	olygon	MATIC	0.87	22.34	91.27	-35.17	-63.98	15.90	7.37	2.13	5.67	1.28	0.64
Av	valanche	AVAX	22.84	14.79	39.21	-69.59	-76.77	121.11	6.71	5.46	9.08	1.40	1.17
\bigtriangledown	Tron	TRX	0.07	3.54	7.52	13.10	-10.38	24.60	6.44	0.85	3.15	0.86	0.69
N	Near	NEAR	3.86	13.60	19.68	-75.27	-74.45	119.58	2.96	4.80	11.55	1.56	1.27
C 🛞	Cosmos	ATOM	9.43	7.36	26.24	-60.31	-68.33	-12.91	2.74	12.28	19.48	1.35	0.42
	lgorand	ALGO	0.35	7.64	14.88	-50.89	-79.11	-54.71	2.51	3.92	7.98	1.19	-0.19
Ø F	Helium	HNT	9.25	5.95	-0.14	-51.15	-74.98	-14.12	1.15	Variable	6.16	1.32	0.41
🔞 F	antom	FTM	0.28	11.05	12.60	-75.19	-86.53	49.03	0.72	6.60	16.99	1.62	0.84
3	Zilliqa	ZIL	0.04	6.84	4.99	-61.95	-47.81	-35.76	0.53	5.50	15.03	1.73	0.38

Bitcoin 30-Day Rolling Volatility



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Bitcoin Moving Averages

Weekly Market Review - July 18th, 2022

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. \$200b

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.

<u>Fiat-Backed</u>

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. Based on asset holdings from March 31st, 2022, the \$4 billion balance in cash and bank deposits, the almost \$7 billion balance in money markets, could have been used for those redemptions. On July 1st, the company released an assurance of holdings report from an independent accounting firm and announced a further reduction of commercial paper by 58%, to \$8.5 billion, which could have all been used for redemptions. A further \$5 billion in Tether's commercial paper holdings are set to expire on July 31st. The July 1st report also revealed an increase in money market funds and U.S. treasury bills from \$34.5 billion to \$39.2 billion. Tether has also reduced exposure to secured loans by \$1 billion and denied any exposure to crypto firm Three Arrows Capital.

Stablecoin Circulating Supply





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У.	Fiat-Backed	Ticker	Supply (\$, bn)	Launch	Chain
ithmic	Tether	USDT	66.37	Sept '14	Multi
	(S) Circle	USDC	54.00	Sept '18	Multi
	Binance	BUSD	18.03	Sept '19	Multi
	TrueUSD	TUSD	1.24	Jan '18	Multi
	O Paxos	USDP	0.84	Sept '18	ETH, BSC
	Huobi	HUSD	0.18	Nov '18	ETH, SOL
	Gemini	GUSD	0.18	Sept '18	ETH
eFi Llama	Crypto-Backed				
22 Jul 22	B MakerDAO	DAI	6.78	Dec '17	Multi
<u>w</u>	🔞 Abracadabra	MIM	1.81	May '21	Multi
	S Liquity	LUSD	0.17	Apr '21	ETH
	Synthetix	sUSD	0.15	Dec '18	ETH, FTM
	s mStable	mUSD	0.05	May '20	ETH
╔╢╓┶┱╌╍┨╽┙					
	Algorithmic				
	Frax	FRAX	1.37	Dec '20	Multi
	Neutrino	USDN	0.75	Oct '19	Multi
	Fei USD	FEI	0.20	Dec '20	ETH
e: Nansen Jul 22	TerraUSD	UST	0.00*	Sept '20	Multi
5					

<u>Key Takeaways</u>

- The FOMC meeting next week will likely include a 75bp rate hike
- Year over Year CPI continues to rise, with core CPI down slightly
- Housing sector numbers are due this week, likely impacted by rising rates

Macro Commentary

Investors looked past economic indicators last week and stayed focused on the path leading to the next move by the Fed. Expectations for a 75 basis point rate hike remained in place, with some strategists calling for an additional 25 basis points based on the markets perceived ability to accommodate the move. June's year over year CPI rose to 9.1% from 8.6% last month, while core CPI, excluding energy and food, declined slightly to 5.9% from 6%. PPI rose to 11.3% from 10.8%, with core also declining slightly to 8.2%, from 8.3%. Both metrics were at historic highs causing markets to rethink the worst was over. After also reaching historic levels last month, the University of Michigan consumer sentiment provided some relief by inching higher to 51.1 from 50 last week. Attention moves to the housing sector this week with indications on Housing Starts and Building Permits to be released on Tuesday, then Existing Home Sales and Mortgage Applications on Wednesday. This sector has been under extreme stress over the last couple months with higher interest rates causing buyers remorse and/or buyers walking away from contracts.

Equities finished the week about unchanged after trending higher following CPI release. The front end of the yield curve, points under 2 years, rose by 30 basis points, moving the 2/10 treasury yield spread lower to -25 basis points before settling at -20 Friday. This continues a trend over the last couple weeks and could be viewed as a precursor to a recessionary period. Unfortunately, these levels are at historic lows, matching periods in late 2006, March 2000, March 1989, then the early 80s.

Authors:

Steven McClurg, CIO Bill Cannon, Portfolio Manager Sean Rooney, VP Research and Trading Josh Olszewicz, Head of Research

Please see important disclosures on next page.





Weekly Market Review - July 18th, 2022

			Returns (%)						
Indices	Ticker	Price (\$)	1 week	1 month	3 month	YTD	1 year		
S&P 500	SPX	3863	-0.93	5.12	-12.05	-18.95	-10.72		
Nasdaq 100	NDX	11983	-1.17	6.37	-13.74	-26.57	-18.38		
Russell 2000	RUT	1744	-1.41	4.72	-13.00	-22.31	-19.36		
Dow Jones Ind.	DJI	31288	-0.16	4.68	-9.18	-13.90	-9.80		
Commodities									
Crude Oil	CL1	99.70	-3.62	-9.75	-7.29	32.14	49.68		
Brent Crude	BRN00	103.75	-2.50	-9.16	-8.06	33.10	50.89		
Natural Gas	NG00	7.09	10.54	1.23	-8.73	97.58	88.14		
Unleaded Gas	RB00	3.29	-4.55	-14.11	-1.75	48.62	56.11		
Gold	GC00	1711.00	-1.17	-7.05	-13.64	-6.48	-5.59		
Silver	SI00	18.76	-1.55	-13.29	-27.99	-19.70	-25.66		
Copper	HG00	3.31	-3.20	-17.38	-30.98	-25.68	-21.13		
Corn	C00	614.25	-2.03	-21.78	-23.79	3.67	11.23		
Wheat	W00	799.50	-6.52	-22.60	-29.14	3.80	14.13		
Bloomberg Commodity Index	BCOM	115.74	-0.15	-8.71	-12.61	16.70	22.55		
Bitcoin	BTC	21828.51	6.94	11.19	-45.55	-52.84	-30.09		
0.00 5.00 5.00 5.00	Mang	Man July Marker	Mus halan				90000 55000 19000 19000 11000 2000 12000 12000 420.00 245.00 145.00 85.00 53.00		

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News Review



Sircle's Detailed Reserve Report Shows Only Cash, Short-Term Treasurys Back USDC Stablecoin

Former Crypto Adviser Michael Barr Confirmed as Top US Financial Watchdog



Sri Lanka Central Bank Reiterates Crypto Warning Following Protestors Seizing President's Residence

 Ukraine
 Seizes
 Assets
 From
 OTC
 Crypto
 Brokers
 for

 Working With Russians
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 Vers

Over 2.6 Million Users Signed Up for the City of Shenzhen's Digital Yuan Airdrop

Polygon Blockchain Named as One of the Six Disney Accelerator Participants

 Reddit Partners with Polygon Blockchain to Launch a New

 NFT Avatar Marketplace

Binance.US and Gemini to Join Network of Data Company Plaid

S Crypto Investment Firm Multicoin Capital Announces New \$430M Venture Fund

Segin Celsius Outlines Next Steps as Bankruptcy Proceedings

US Bankruptcy Court Approves Foreign Administrator forThree Arrows Capital's Debt

Weekly Market Review - July 18th, 2022

Weekly Thoughts: Source: Valkyrie Investments, Inc.

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

Macro 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

Stablecoin Circulating Supply: Source: Valkyrie Investments, DeFi Llama

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

"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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