STATE OF THE MARKET

JULY 27 - AUG. 2, 2023

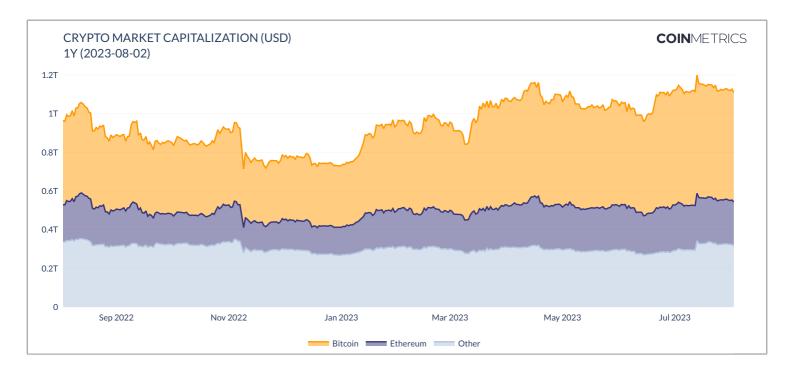
Coin Metrics' State of the Market provides an overview of cryptoasset market activity



COINMETRICS

MARKET SUMMARY

Though Coinbase's Layer-2 protocol Base is yet to open to the public, hacks and hype have already put the protocol's earliest users in some hairy situations. After rolling out access of their Optimism-powered scaling stack to a limited cohort of developers, the Base ecosystem quickly gave rise to a handful of viral memecoins, the biggest being BALD. A tongue-in-cheek reference to the Coinbase CEO's signature slick scalp, BALD gained 289,000% within days, amassing nearly \$85M in market cap by Sunday. However, holders took a massive -92% haircut after an apparent "rug pull" by the token's chief developer, with the contract deployer removing more than \$25M in liquidity from BALD trading pairs. Suspiciously, on-chain sleuths pointed out that the developer's address has previously interacted with FTX & Alameda wallets, leading some to speculate that BALD's creator could be Sam Bankman-Fried himself (though others counter SBF is currently on house arrest with highly restricted internet access). Receding liquidity isn't the Base community's biggest worry. On Tuesday, the network's largest decentralized exchange LeetSwap disclosed that "some pool liquidity might have been compromised," leading to a temporary suspension in trading activity. An in-depth investigation is still under way, but Wintermute's Igor Igamberdiev noted the protocol's exposed 'transferFeesSupportingTaxTokens' function was the likely source of the exploit, allowing the attacker to drain wrapped Ether (wETH) from liquidity pools. In total, the hacker made away with around 342 ETH (\$626K) in LeetSwap liquidity, with white hat hackers "rescuing" an additional 400 ETH from exposed liquidity pools on the DEX's behalf. The LeetSwap drama remains relatively confined within the still-nascent Base network, but DeFi darling Curve Finance may be at risk of an even more chaotic downturn. After a reentrancy bug was discovered in Vyper- the programming language underpinning much of Curve's infrastructure— multiple stablecoin-to-stablecoin swap pools were exploited, with more than \$50M drained (including \$20M in CRV). This revelation put major pressure on CRV token prices, with a week-over-week drop of more than 20 percent and the total value of assets on Curve collapsing from \$3B to lows around \$1.7B. DeFi's biggest stakeholders are rushing to contain the Curve contagion, particularly given the massive \$168M CRV-collateralized lending position held by founder Michael Egorov. Egorov's position represents more than onethird of the total market capitalization of CRV, meaning the liquidation of his loan would wreak havoc across the heavily interconnected Web3 ecosystem. Meanwhile in TradFi, Michael Saylor continues to up the ante on his BTC bet. In an August 1st filing, Microstrategy disclosed plans to issue up to \$750M in additional MSTR shares, with net proceeds earmarked for more "bitcoin and working capital." As of the company's Q2 earnings call on Tuesday, the software shop held a staggering 152,800 BTC. Centralization of supply may present itself differently across each ecosystem, but both BTC and DeFi face the daunting challenge of offsetting the influence of their most powerful capital allocators.

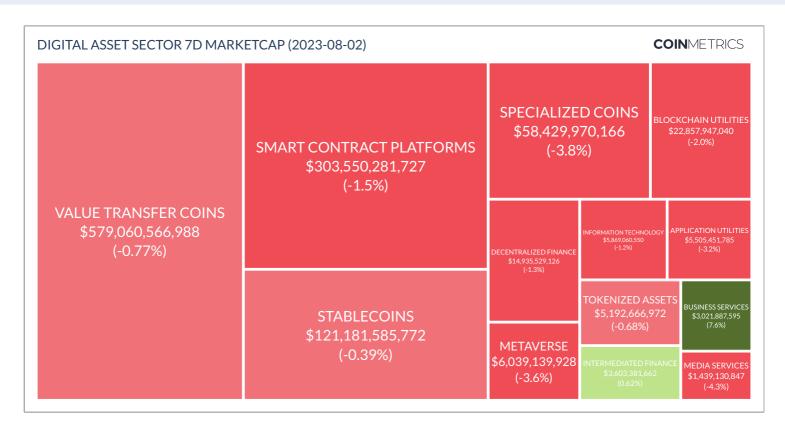


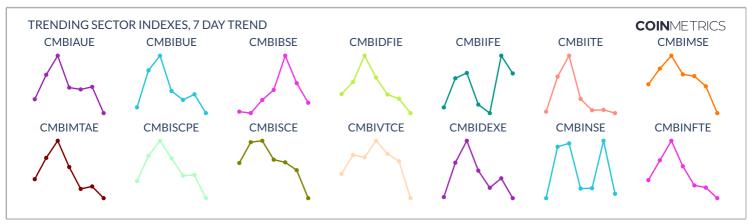
PRICE (CMBI CONSTITUENTS)

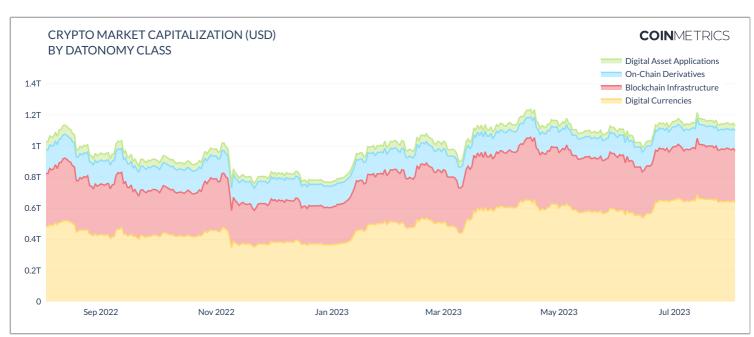
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$29,157.89	+0.08%	\$29,340.04	\$29,134.55	+29.52%	\$31,644.02	\$15,799.60
ETH	\$1,839.53	-1.05%	\$1,877.90	\$1,839.53	+15.33%	\$2,129.88	\$1,103.83
SOL	\$23.17	-6.83%	\$25.23	\$23.17	-39.72%	\$46.47	\$8.35
DOT	\$5.06	-2.64%	\$5.25	\$5.06	-36.48%	\$9.54	\$4.27
ADA	\$0.30	-1.61%	\$0.31	\$0.30	-39.37%	\$0.57	\$0.24
DOGE	\$0.07	-3.13%	\$0.08	\$0.07	+12.85%	\$0.14	\$0.06
TRX	\$0.08	-6.82%	\$0.08	\$0.08	+11.19%	\$0.08	\$0.05
BNB	\$241.03	+0.48%	\$246.53	\$239.89	-22.13%	\$353.50	\$228.54
AVAX	\$12.53	-4.30%	\$13.25	\$12.53	-45.83%	\$29.19	\$10.78
XLM	\$0.15	-8.04%	\$0.16	\$0.15	+28.24%	\$0.17	\$0.07
CMBI10	\$3,051.35	-0.57%	\$3,096.30	\$3,051.35	+15.41%	\$3,398.54	\$1,838.40

ASSET CLASSES





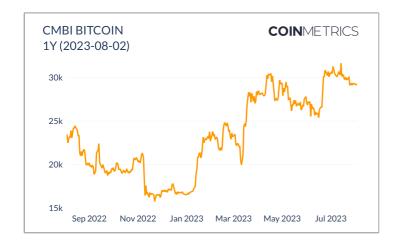


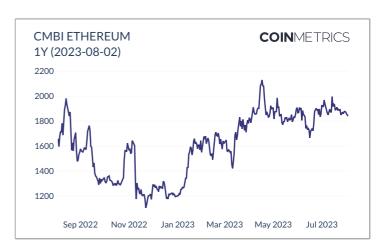
INDEX ROUNDUP

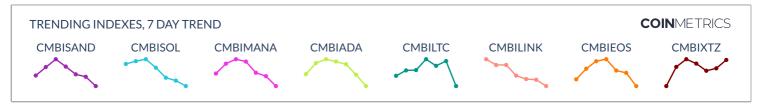
SINGLE ASSET INDEXES

The CMBI Single Asset series are institutionally designed cryptoasset benchmarks that accurately & reliably represent a real-time market aggregate USD value for singular crypto assets.

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
СМВІВТС	\$29,157.89	+0.08%	\$29,340.04	\$29,134.55	+29.52%	\$31,644.02	\$15,799.60
СМВІВТСТ	\$31,326.90	+0.08%	\$31,522.60	\$31,301.83	+29.52%	\$33,997.97	\$16,974.91
СМВІЕТН	\$1,839.53	-1.05%	\$1,877.90	\$1,839.53	+15.33%	\$2,129.88	\$1,103.83
СМВІЕТНТ	\$1,996.98	-1.05%	\$2,038.64	\$1,996.98	+15.33%	\$2,312.19	\$1,198.31



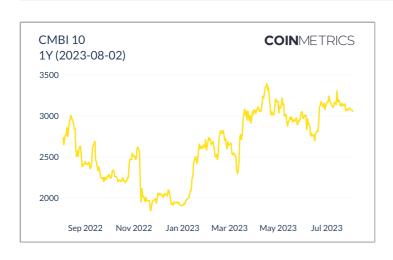




MULTI ASSET INDEXES

 $The CMBI \ Multi \ Asset series are institutionally designed \ cryptoasset \ benchmarks \ that \ accurately \& \ reliably \ represent \ a \ real-time \ market \ aggregate \ USD \ value \ for \ baskets \ of \ crypto \ assets.$

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$3,051.35	-0.57%	\$3,096.30	\$3,051.35	+15.41%	\$3,398.54	\$1,838.40
CMBI10E	\$4,538.45	-3.48%	\$4,775.07	\$4,538.45	-23.17%	\$6,768.61	\$3,409.70
CMBI10EX	\$6,567.83	-1.49%	\$6,744.68	\$6,567.83	-1.07%	\$7,991.44	\$4,562.49
CMBI10M	\$10,168.85	-1.17%	\$10,413.33	\$10,168.85	-30.43%	\$16,183.43	\$9,310.27
CMBIBE	\$14,937.10	-0.33%	\$15,108.82	\$14,937.10	+24.32%	\$16,210.93	\$8,387.96





MARKET MOVEMENT

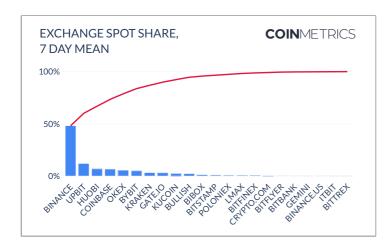
TRADING DIARY, 7 DAY

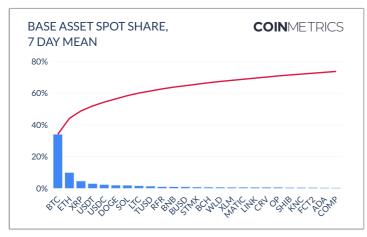
ADVANCING VOLUME \$79,716,006,365

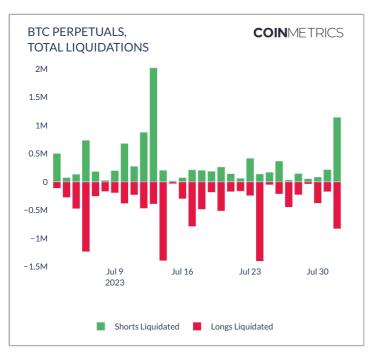
DECLINING VOLUME \$16,313,168,472

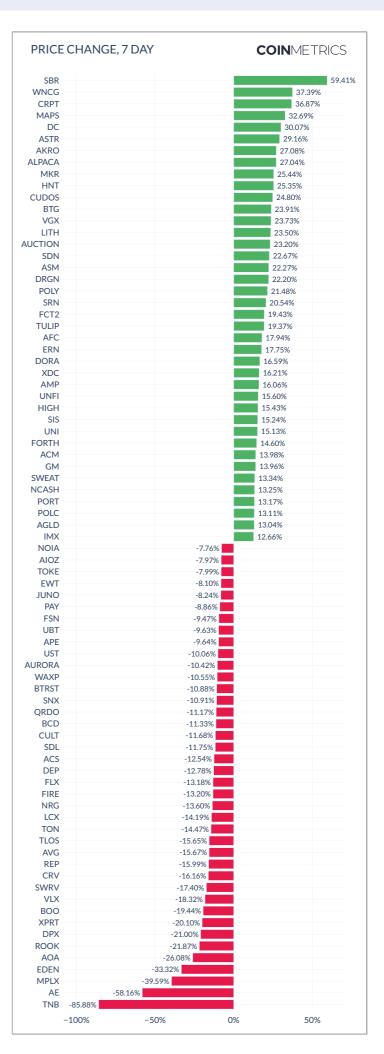
ADVANCES 389

DECLINES 252

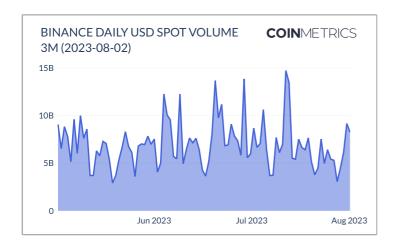


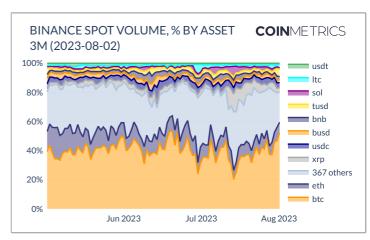


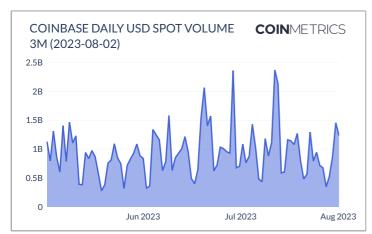


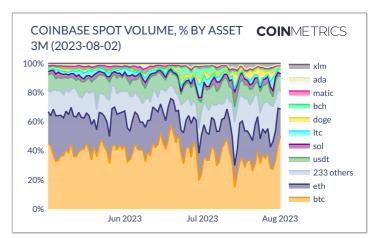


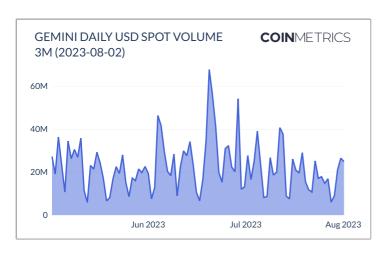
EXCHANGE SPOT VOLUME

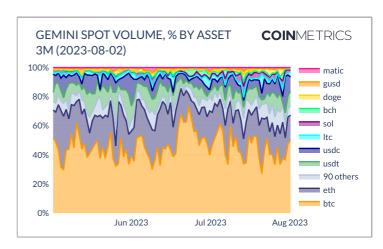


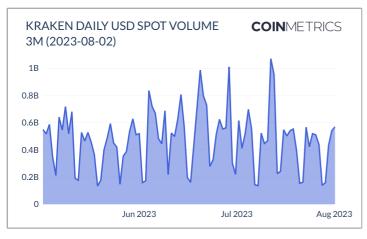


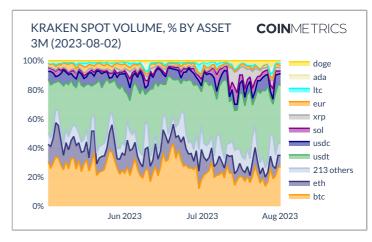




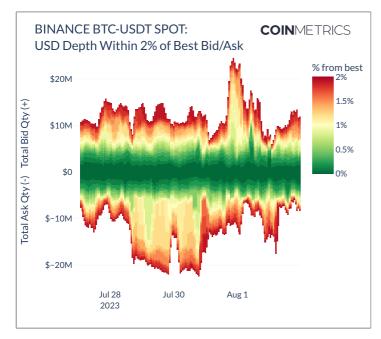


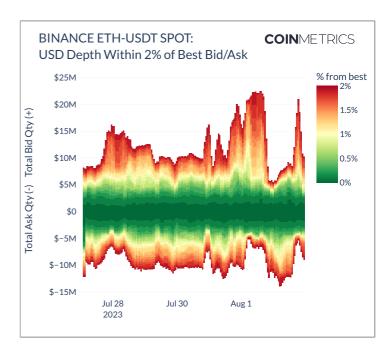


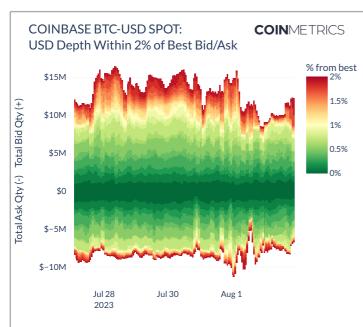


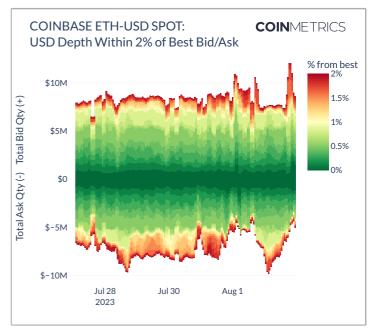


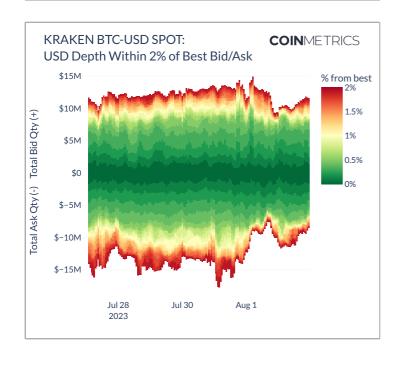
ORDER BOOK DEPTH

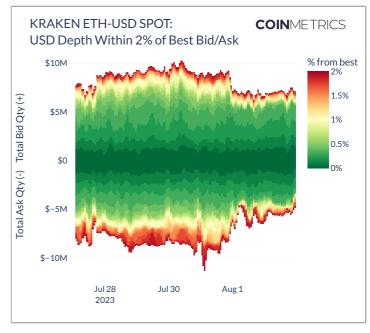






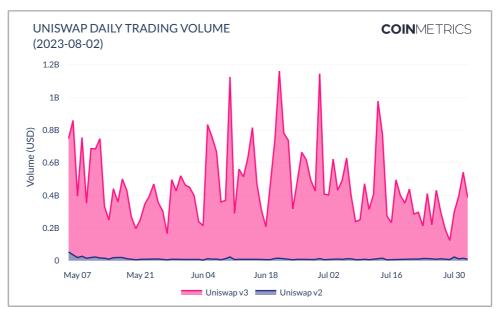




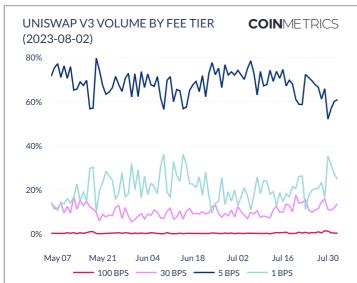


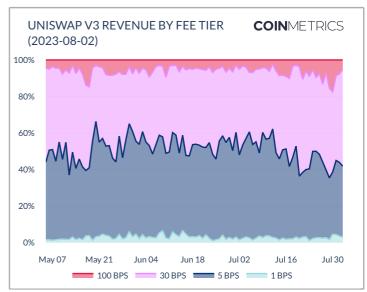
DEX DIGEST

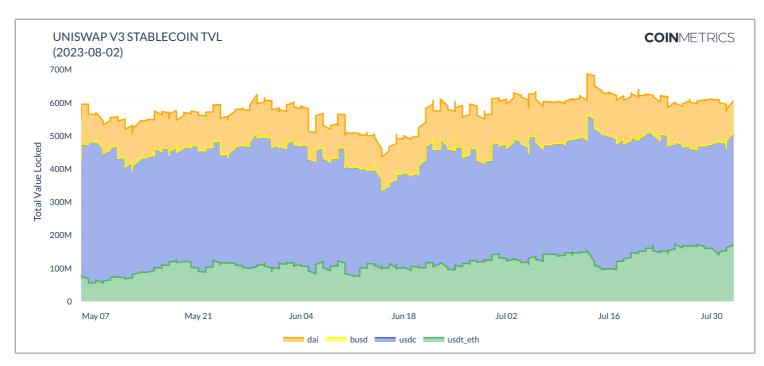






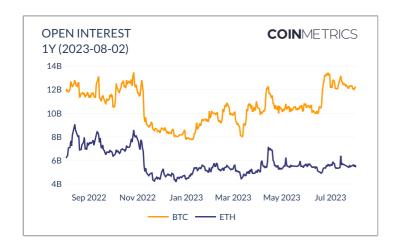


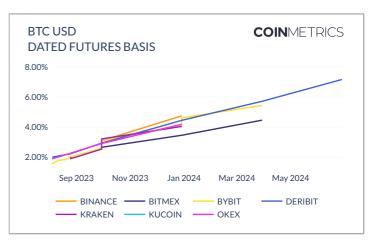




Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

FUTURES FEED





OPEN INTEREST

Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.23%	12,192,716,350	12,331,602,569	12,028,745,475
ETH	-1.76%	5,546,257,995	5,625,816,945	5,421,711,575
XRP	+3.16%	713,519,590	729,751,330	698,879,131
ADA	+0.21%	115,816,951	120,516,658	112,770,578
LINK	-8.86%	166,081,324	188,561,563	150,005,929
LTC	+16.07%	460,414,642	492,286,431	424,116,770
UNI	+72.84%	57,440,052	74,800,041	42,794,693
CRO	+12.94%	4,329,159	4,536,061	4,012,261
ВСН	+0.28%	292,840,640	321,629,398	280,445,380

FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+123.35%	18,639,430,936	34,586,801,259	5,255,009,286
ETH	+47.49%	8,467,559,718	14,573,837,368	3,540,567,080
XRP	-30.73%	1,714,938,751	2,227,929,015	769,118,743
ADA	+43.78%	240,658,647	336,709,574	151,423,403
LINK	-44.68%	484,947,478	893,960,388	252,905,278
LTC	+236.21%	1,368,579,755	2,473,669,427	671,846,045
UNI	+151.14%	219,610,748	327,261,511	107,158,479
CRO	+56.52%	1,673,613	4,814,545	742,512
всн	+43.99%	953,728,092	1,486,575,488	343,021,359





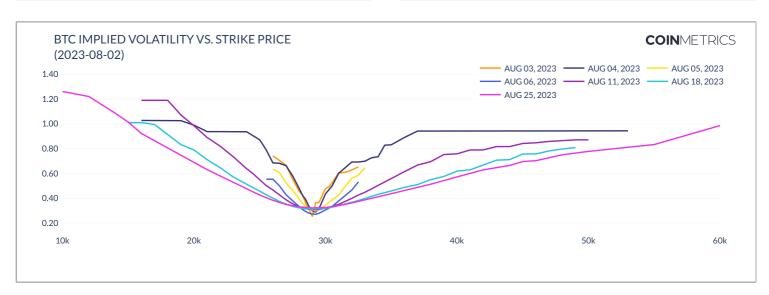


OPTIONS SNAPSHOT

BTC OPEN INTEREST

ETH OPEN INTEREST

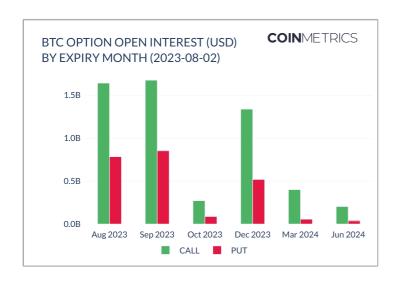
TOTAL	\$7,626,876,639	TOTAL	\$5,087,492,257
CALLS	\$5,364,240,916	CALLS	\$3,859,341,275
PUTS	\$2,262,635,723	PUTS	\$1,228,150,982

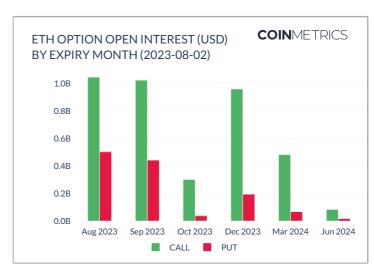


AT THE MONEY OPTIONS

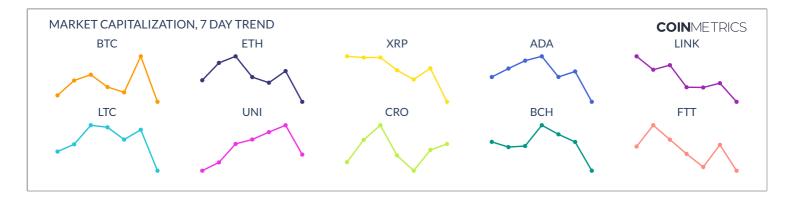
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

			CALLS								PUTS			
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
8.61702	-79.02595	1.69787	0.74153	0.00022	0.3581	0.0227	BTC-3AUG23-28500	0.0001	0.3581	0.00022	-0.25847	-0.64352	-79.02595	8.61702
9.50609	-87.17951	1.56799	0.68185	0.00024	0.286	0.0143	BTC-3AUG23-28750	0.0002	0.2861	0.00024	-0.31815	-0.79393	-87.17951	9.50609
10.1653	-93.22506	1.4258	0.61761	0.00026	0.255	0.0066	BTC-3AUG23-29000	0.0011	0.255	0.00026	-0.38294	-0.95798	-93.25816	10.16891
10.54524	-96.70949	1.2754	0.55054	0.00027	0.2561	0.0018	BTC-3AUG23-29250	0.0048	0.2561	0.00027	-0.44946	-1.1276	-96.70949	10.54524
25.36713	-31.71092	11.49263	0.71647	0.00008	0.3475	0.0246	BTC-4AUG23-28500	0.0014	0.3475	0.00008	-0.28353	-5.68437	-31.71092	25.36713
4.70968	-49.80715	1.2292	0.85811	0.00028	0.3169	0.0172	BTC-4AUG23-28750	0.0024	0.3168	0.00028	-0.14189	-0.21377	-49.80715	4.70968
27.08238	-33.85511	10.85696	0.67132	0.00009	0.3008	0.0107	BTC-4AUG23-29000	0.0045	0.3008	0.00009	-0.32868	-6.62139	-33.85511	27.08238
7.46266	-72.96622	0.99025	0.68361	0.00047	0.3069	0.0063	BTC-4AUG23-29250	0.0086	0.307	0.00047	-0.31639	-0.47782	-72.96622	7.46266
7.88774	-72.33779	1.79745	0.78263	0.0002	0.3295	0.026	BTC-5AUG23-28500	0.0026	0.3295	0.0002	-0.21737	-0.54393	-72.33779	7.88774
8.90436	-81.66111	1.67951	0.72787	0.00022	0.3141	0.0191	BTC-5AUG23-28750	0.0042	0.3141	0.00022	-0.27213	-0.68241	-81.66111	8.90436





MARKET CAPITALIZATION



MARKET CAP

USD value of current supply. Also referred to as market capitalization.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.17%	569,425,861,542	573,626,834,712	566,723,906,311
ETH	-1.08%	228,586,213,773	230,838,369,518	225,639,073,242
XRP	-3.98%	70,463,060,934	71,327,912,377	68,486,150,203
ADA	-2.69%	10,580,917,878	10,774,548,825	10,254,428,768
LINK	-8.00%	7,669,791,360	7,984,036,871	7,345,212,478
LTC	-3.26%	6,756,022,725	6,937,047,443	6,421,912,023
UNI	+4.82%	6,279,385,632	6,659,183,481	5,863,018,582
CRO	+1.00%	5,936,482,516	6,015,752,925	5,867,950,366
ВСН	-6.21%	4,732,162,179	4,923,020,092	4,457,860,542
FTT	-3.71%	452,223,426	469,287,252	437,567,153

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.18%	403,163,201,631	406,129,283,029	401,243,812,257
ETH	-1.08%	204,380,705,238	206,417,296,132	201,792,096,009
XRP	-3.91%	32,750,493,398	33,131,119,817	31,834,712,219
ADA	-2.78%	9,445,930,867	9,618,976,547	9,150,117,407
LINK	-8.00%	4,041,467,567	4,207,105,265	3,870,339,177
LTC	-3.25%	5,819,527,037	5,975,117,308	5,531,931,012
UNI	+4.83%	1,551,848,335	1,645,786,451	1,448,903,624
CRO	+0.99%	658,971,608	667,799,379	651,326,850
ВСН	-6.20%	3,193,568,968	3,322,112,949	3,008,587,814
FTT	-3.71%	452,223,426	469,287,252	437,567,153

REALIZED CAP

USD value for all native units based on the USD closing price on the day that a unit last moved.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.34%	395,987,617,225	397,097,044,604	395,743,478,910
ETH	-0.38%	161,718,445,314	161,929,770,537	161,308,107,863
XRP	+1.73%	53,178,694,292	53,694,777,840	52,711,448,759
ADA	-0.34%	16,402,791,889	16,425,486,200	16,364,324,470
LINK	-0.22%	8,307,614,229	8,317,122,276	8,294,898,598
LTC	+0.02%	6,957,652,334	6,961,777,340	6,953,840,894
UNI	+0.45%	8,488,268,600	8,515,996,721	8,463,526,730
CRO	+0.01%	22,426,399,350	22,428,304,512	22,425,106,562
ВСН	-0.02%	4,737,475,682	4,739,873,002	4,735,428,671
FTT	-0.73%	850,587,342	852,218,454	845,691,620

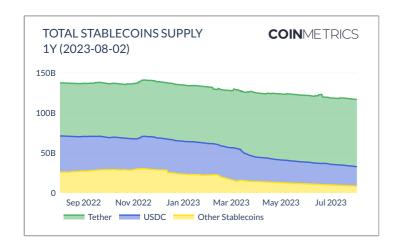
MARKET VALUE TO REALIZED VALUE

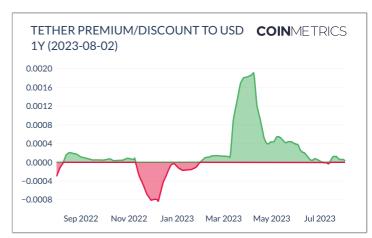
The ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.17%	1.44	1.45	1.43
ETH	-0.71%	1.41	1.43	1.40
XRP	-5.61%	1.33	1.35	1.28
ADA	-2.36%	0.65	0.66	0.63
LINK	-7.80%	0.92	0.96	0.89
LTC	-3.28%	0.97	1.00	0.92
UNI	+4.36%	0.74	0.78	0.69
CRO	+0.99%	0.26	0.27	0.26
ВСН	-6.19%	1.00	1.04	0.94
FTT	-3.00%	0.53	0.55	0.52



STABLECOINS REPORT





MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.03%	39,018,246,099	39,026,761,911	39,004,120,567
USDT	-0.03%	887,801,970	887,995,735	887,480,565
USDT_TRX	-0.03%	44,020,689,053	44,030,296,660	44,004,752,519
PAX	-2.89%	543,710,121	547,000,222	530,839,449
DAI	-2.24%	4,140,761,708	4,172,167,271	4,078,530,906
USDC	-1.56%	24,572,337,713	24,686,507,489	24,300,843,180
BUSD	-5.43%	3,668,398,707	3,739,163,628	3,536,240,200
GUSD	-1.01%	362,403,355	364,609,431	360,773,978

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+27.95%	3,231,317,368	5,783,951,069	999,786,884
USDT	+21.33%	66,268	139,180	2,529
USDT_TRX	+11.39%	8,729,740,168	10,809,370,299	4,553,224,184
PAX	+94.05%	31,410,349	105,738,014	6,341,875
DAI	+42.52%	1,950,364,114	4,475,152,419	607,515,067
USDC	+52.09%	3,796,002,004	7,464,945,859	1,163,675,623
BUSD	+235.73%	134,410,447	374,675,839	2,176,371
GUSD	-97.48%	10,050,835	51,975,547	597,253





TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+13.73%	92,553	115,238	69,186
USDT	+47.62%	21	38	12
USDT_TRX	+13.92%	1,806,682	2,087,161	1,471,936
PAX	+18.35%	118	206	71
DAI	+74.45%	4,336	6,647	2,911
USDC	+17.92%	35,215	52,087	23,403
BUSD	+24.39%	468	612	326
GUSD	+10.91%	78	109	55

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

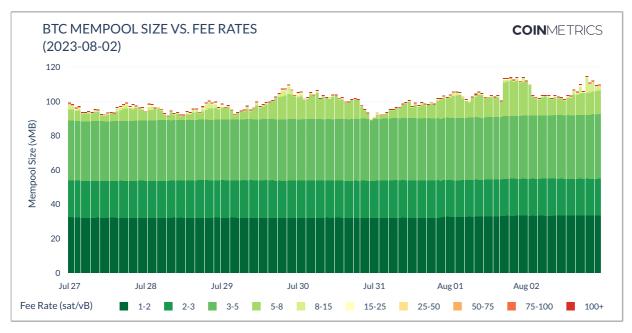
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+13.91%	787	995	502
USDT	+888.22%	786	1,873	50
USDT_TRX	+0.47%	190	200	150
PAX	+478.43%	16,152	46,343	1,805
DAI	+36.02%	1,889	2,819	1,200
USDC	+30.57%	1,089	1,562	713
BUSD	+10.43%	770	1,200	210
GUSD	-62.42%	16,707	81,549	737

VELOCITY

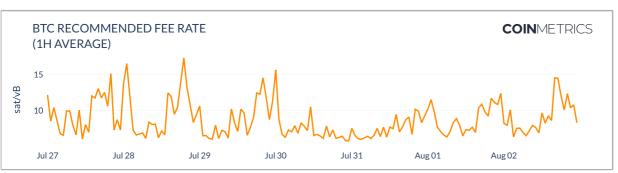
Number of times that an average native unit among the active supply has been transferred in the past 1 year

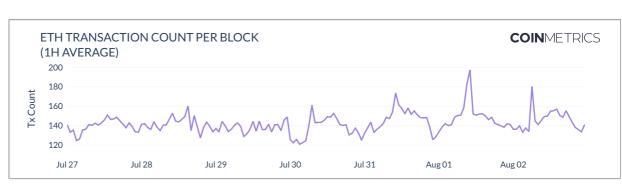
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN	
USDT_ETH	+0.72%	35.77	35.96	35.67	
USDT	-0.19%	34.99	35.03	34.96	
USDT_TRX	+0.63%	67.63	67.90	67.47	
PAX	+3.00%	32.60	33.50	32.21	
DAI	-0.35%	251.74	253.52	249.66	
USDC	+0.58%	129.03	129.95	128.36	
BUSD	+8.28%	71.07	75.08	69.34	
GUSD	+0.03%	15.60	15.62	15.57	

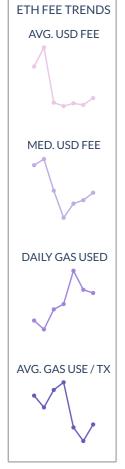
FEE MARKET



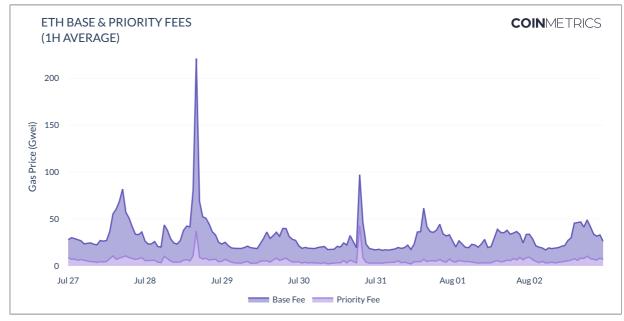








COINMETRICS



NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+13.37%	966,815	1,069,904	889,450
ETH	+6.02%	447,636	532,896	414,079
XRP	+518.56%	90,372	170,276	27,281
ADA	-29.92%	43,887	51,878	35,416
LINK	-16.30%	2,313	2,963	1,711
LTC	-10.20%	238,923	263,168	209,995
UNI	+48.72%	884	1,212	663
CRO	+48.33%	332	399	269
ВСН	-26.46%	72,164	102,586	35,887
FTT	+44.44%	105	215	68

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.02%	13,766,295	13,768,031	13,764,706
ETH	+0.03%	109,730,270	109,771,330	109,623,162
XRP	+0.07%	46,473,653,338	46,479,256,252	46,443,674,543
ADA	-0.05%	30,608,103,241	30,622,003,234	30,598,141,625
LINK	-0.00%	526,933,041	526,939,609	526,919,975
LTC	+0.07%	63,292,663	63,313,478	63,270,614
UNI	+0.01%	247,133,652	247,145,783	247,125,880
CRO	-0.01%	11,100,370,190	11,101,021,531	11,099,634,302
ВСН	+0.03%	13,134,794	13,137,104	13,132,813
FTT	+0.00%	328,895,104	328,895,104	328,895,104

COINMETRICS ACTIVE ADDRESSES, 7 DAY TREND BTC ETH XRP ADA LINK LTC UNI CRO BCH FTT

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-4.84%	453,900	645,339	393,762
ETH	+4.38%	1,020,528	1,068,108	981,157
XRP	+84.20%	840,597	1,268,354	612,171
ADA	-23.17%	64,826	74,939	57,234
LINK	-20.43%	2,793	3,451	2,030
LTC	-11.27%	129,491	143,818	107,942
UNI	+80.19%	1,178	1,675	747
CRO	+86.57%	406	528	283
ВСН	-43.98%	60,408	119,857	21,146
FTT	+86.67%	148	474	67

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+6.03%	3,553,028,371	4,531,846,129	2,234,013,211
ETH	+49.54%	2,513,753,514	3,389,644,196	1,184,089,243
XRP	+32.26%	655,552,583	1,344,499,448	380,590,798
ADA	-11.05%	7,114,132,463	7,764,093,469	6,151,463,830
LINK	-31.38%	59,545,434	79,412,798	34,843,107
LTC	+21.39%	85,001,294	98,082,282	76,192,848
UNI	+618.85%	39,649,549	78,066,169	10,859,821
CRO	+63.78%	1,727,328	4,081,176	583,273
ВСН	-7.82%	40,877,861	62,679,862	14,415,545
FTT	+988.34%	1,776,714	5,423,757	212,307

ADDRESSES ≥ \$1

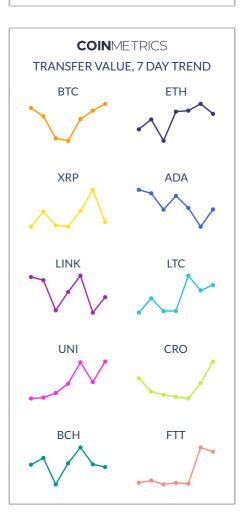
Count of addresses holding at least \$1 worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.10%	40,538,133	40,628,971	40,438,546
ETH	-0.02%	60,793,100	60,928,951	60,662,237
XRP	+0.20%	4,729,408	4,734,287	4,724,746
ADA	-0.15%	3,581,984	3,589,182	3,573,202
LINK	-0.08%	526,146	526,496	525,906
LTC	+0.08%	2,400,832	2,413,860	2,387,042
UNI	+0.17%	285,414	285,950	284,779
CRO	+0.08%	150,266	150,371	150,151
всн	-1.14%	4,607,842	4,655,573	4,555,008
FTT	-0.16%	21,618	21,654	21,581

ADDRESSES ≥ \$1M

Count of addresses holding at least 1M worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.03%	73,554	73,812	73,435
ETH	-0.84%	10,627	10,683	10,520
XRP	-3.32%	1,462	1,478	1,429
ADA	-1.64%	864	876	842
LINK	-5.33%	441	453	426
LTC	+0.40%	513	523	501
UNI	+1.55%	328	333	322
CRO	+0.00%	49	50	48
ВСН	-4.78%	355	374	339
FTT	+0.00%	14	14	13



DATA EXPLAINER (P.1)

ESTIMATED MARKET CAPITALIZATION (MARKET CAP)

Estimated Market Capitalization (Market Cap) is an asset's reported supply multiplied by its price. In this version of the metric, circulating supply is reported by the projects or other derived sources.

PRICE

Closing Price (4PM), High Price, Low Price, % Change in Price for each asset for the previous month and the previous 52-week period. Price represents Coin Metrics' Reference Rate, which is calculated using an independent methodology robust to manipulation. More information on Coin Metrics' Reference Rates.

DIGITAL ASSET TAXONOMY

Asset classes, sectors, and sub-sectors are derived from datonomy $^{\text{TM}}$, a digital asset classification system created by Coin Metrics, Goldman Sachs, and MSCI, offering a consistent, standardized way for investors to analyze the digital assets ecosystem.

Class is the top level of the classification system, describing the fundamental purpose of an asset.

Sector describes specialization of an asset within a class.

Sub-Sector delineates the asset within a sector by the specific product, service, or function it provides to users.

datonomy™ offers a new level of transparency into how the market is moving and serves as a powerful foundation for portfolio performance measurement, risk management, reporting, & investment strategy. <u>More info</u> on datonomy.

SECTOR INDEXES

The Total Market Series is a suite of indexes measuring segments of the digital assets ecosystem as defined by datonomy™, allowing investors to passively track the growth of sectors and sub-sectors. The full list of index offerings is outlined below:

- CMBIAUE: CMBI Application Utilities Sector Even
- CMBIBUE: CMBI Blockchain Utilities Sector Even
- CMBIBSE: CMBI Business Services Sector Even
- CMBIDFIE: CMBI Decentralized Finance Sector Even
- CMBIITE: CMBI Information Technology Sector Even
- CMBIIFE: CMBI Intermediated Finance Sector Even
- CMBIMSE: CMBI Media Services Sector Even
- CMBIMTAE: CMBI Metaverse Sector Even
- CMBISCPE: CMBI Smart Contracts Platform Sector Even
- CMBISCE: CMBI Specialized Coins Sector Even
- CMBIVTCE: CMBI Value Transfer Coins Sector Even
- CMBIDEXE: CMBI Decentralized Exchanges Sub-Sector Even
- CMBINSE CMBI Network Scaling Sub-Sector Even
- CMBINFTE: CMBI NFT Ecosystem Sub-Sector Even

CMBI SINGLE ASSET SERIES

The CMBI Single Asset Series provide the cryptoasset community, investors and asset managers with publicly available and investable benchmarks that reliably and accurately track the price of a single cryptoasset, through sourcing market prices from numerous global liquidity venues. More information on Coin Metrics Indexes.

CMBI BITCOIN

Daily level for Coin Metrics Bletchley Index (CMBI) Bitcoin for the previous month. CMBI Bitcoin tracks the price and performance of Bitcoin by sourcing BTC/USD market prices from numerous global liquidity venues. As of 7/30/2023 constituent markets in the CMBI Bitcoin were Binance.US, Bitstamp, Bittrex, Coinbase, Gemini, itBit and Kraken. More information on Coin Metrics Indexes.

CMBI ETHEREUM

Daily level for CMBI Ethereum for the previous month. CMBI Ethereum tracks the price of Ethereum by sourcing ETH/USD market prices from numerous global liquidity venues. As of 7/30/2023 constituent markets in the CMBI Ethereum were Binance.US, Bitstamp, Bittrex, Coinbase, Gemini, itBit and Kraken. More information on Coin Metrics Indexes.

CMBI MULTI ASSET SERIES

The CMBI Multi Asset Series provide the cryptoasset community, investors and asset managers with publicly available and investable benchmarks that reliably and accurately track the value of cryptoasset markets. More information on Coin Metrics Indexes.

CMBI 10

Daily level for CMBI 10 for the previous month. The CMBI 10 is designed to measure the performance an investor would expect from investing in a diversified basket of cryptoassets weighted by their free float market capitalization. The 10 largest cryptoassets, defined by an asset's expected 10 year future market capitalization, are selected as the index constituents. More information on Coin Metrics Indexes.

CMBI 10 MOMENTUM

Daily level for CMBI 10 Momentum for the previous month. The CMBI 10 Momentum is designed to measure the performance of a short term momentum factor applied to a basket of the 10 largest cryptoassets. The 10 largest cryptoassets, defined by an asset's expected 10 year future market capitalization, are selected as the index constituents. More information on Coin Metrics Indexes.

DATA EXPLAINER (P.2)

TRADING DIARY

Total Volume, which is the total traded volume for the previous week for the cryptoassets under Coin Metrics Reference Rate Coverage.

Adv. Volume is the total traded volume for the previous week for all cryptoassets under Coin Metrics Reference Rate Coverage that had closing prices higher than their opening prices for the week.

Decl. Volume is the total traded volume for the previous week for all cryptoassets under Coin Metrics Reference Rate Coverage that had closing prices lower than their opening prices for the week.

Advances are the number of cryptoassets that had closing prices higher than their opening price for the week.

Declines are the number of cryptoassets that had closing prices lower than their opening price for the week.

The ratio of advances to declines can be used to determine the breadth of market direction. For example, higher advance/decline ratios indicate that advancing market direction is driven by a broader set of cryptoassets.

EXCHANGE SPOT VOLUME MARKET SHARE

Market share of exchange spot volume for the previous week for the Markets covered by Coin Metrics.

BASE ASSET SPOT VOLUME MARKET SHARE

Market share of base asset volume for the previous week for the top 25 cryptoassets based on volume under Coin Metrics Reference Rate Coverage.

LIQUIDATIONS

Exchanges which offer futures products have a liquidation system that will attempt to close a market participant's position before the point at which the market participant begins to owe more than the available amount of collateral in their account. If a short trade enters liquidation, the exchange will enter a 'buy' order to forcibly close out the position. Vice versa, if a long trade enters liquidation, the exchange will enter a 'sell' order to forcibly close out the position.

% PRICE CHANGE

Percentage change in price over the previous week for cryptoasset gainers and losers in Coin Metrics' Reference Rate and Market Cap coverage universe. Coin Metrics' price/Reference Rate is calculated using an independent methodology robust to manipulation. More information on Coin Metrics' Reference Rates.

REPORTED EXCHANGE VOLUME

Our exchange reported volume metric is an aggregation of the daily reported volume from an exchange in units of U.S. dollars.

SPOT VOLUME SHARE, % BY ASSET

Exchange spot volume asset share is derived using Coin Metrics market candles. Candles include volume and volume-weighted average price, as well as open, high, low, and close values for each market. Candles are available at various intervals, from 1-minute to 1-day frequency. Candle USD volume is calculated by aggregating the total volume of trades for each base pair in a given window and multiplying by the asset's Coin Metrics Reference Rate.

ORDER BOOK DEPTH

Order book depth (+/-2%) is calculated using Coin Metrics order book snapshots. Coin Metrics stores three types of order book snapshots. One type consists of a snapshot of the top 100 bids and top 100 asks taken once every 10 seconds for major markets. The 2nd type includes all levels where the price is within 10 percent of the midprice taken once every 10 seconds for major markets. The 3rd type consists of a full order book snapshot (every bid and every ask) taken once every hour for all markets that we are collecting order book data for.

DEX REPORTED SPOT VOLUME

Decentralized exchange spot volume is calculated by aggregating the total amount of USD trading volume occurring in major DEX liquidity pools. The subset of liquidity pools where both the base and the quote asset have a Coin Metrics Reference Rate are included.

DEX RISING VOLUME

Decentralized exchange rising volume is calculated by aggregating the total amount of USD trading volume occurring in major DEX liquidity pools and selecting the pools with the largest week-over-week rise in volume. The subset of liquidity pools where both the base and the quote asset have a Coin Metrics Reference Rate are included.

DEX FALLING VOLUME

Decentralized exchange falling volume is calculated by aggregating the total amount of USD trading volume occurring in major DEX liquidity pools and selecting the pools with the largest week-over-week decline in volume. The subset of liquidity pools where both the base and the quote asset have a Coin Metrics Reference Rate are included.

DATA EXPLAINER (P.3)

DEX VOLUME BY FEE TIER

Decentralized exchange volume by fee tier is calculated by aggregating the total amount of swap USD volume that occurred in each liquidity pool, segmented by the different fee tiers of pools available for each pair. Revenue by fee tier is calculated by multiplying the amount of USD volume by the fee tier of the liquidity pool in which the volume occurred. More information on Coin Metrics DeFi data.

DEX TOTAL VALUE LOCKED (TVL)

Decentralized exchange total value locked is derived by calculating the amount of tokens held in all DEX liqudity pools covered by Coin Metrics. Balance held by each liquidity pool smart contract is retrieved using ATLAS, Coin Metrics' universal blockchain search engine. More information on Coin Metrics ATLAS.

FUTURES OPEN INTEREST

The reported futures open interest from markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset. Covered markets can be found in the Coin Metrics <u>Data Encyclopedia</u>.

FUTURES BASIS

The futures basis is the percent difference between the price of a dated futures contract and the price of its underlying spot market, calculated using the Coin Metrics Reference Rate. In addition to calculating futures basis manually, Coin Metrics also offers annualized <u>futures basis metrics</u> at the exchange-asset level.

FUTURES VOLUME

The reported futures volume from the markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset. Covered markets can be found in the Coin Metrics DataEncyclopedia.

FUNDING RATES

Funding rates are a mechanism that exchanges use to ensure that perpetual futures trade at a price that is close to the price of the underlying spot markets. The funding rate is used to calculate the funding fee which long position holders pay short position holders, or vice versa, as a way to incentivize market participants to take positions that keep perpetual futures prices close to the underlying.

Positive funding rates indicate that the price of a perp contract is higher than mark price, forcing traders with long positions to pay those holding shorts. Inversely, negative funding rates mean that perp prices are below mark price, so those with shorts must pay the longs. Some analysts have noted that persistently positive funding rates tend to precede a downturn, while persistently negative rates can lead to short squeezes.

PERP & NON-PERP OPEN INTEREST

The reported futures open interest from markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset and segmented by contract type (perpetual and non-perpetual futures).

A perpetual ("perp") contract is a special type of futures contract, which is an agreement to buy or sell a cryptoassets at a predetermined price at a specified time in the future. Perpetuals do not have a an expiry date, so one can hold the position for as long as desired.

OPTIONS OPEN INTEREST

The reported options open interest from markets in Coin Metrics' coverage in units of U.S. dollars. Currently, the open interest displayed is collected from Deribit, the largest crypto options exchange. Open interest is broken down into calls (long positions) and puts (short positions) to highlight prevailing investor sentiment.

OPTIONS IMPLIED VOLATILITY VS. STRIKE PRICE (VOLATILITY SMILE)

Implied volatility represents the market's expectation of future volatility as derived from options prices, calculated using an options pricing model. When this value is input to an options pricing model, that makes the actual options price equal to its theoretical price.

The options implied volatility (IV) vs. strike price visualization (also known as a "volatility smile") is generated by plotting the IV of each options contract with a common expiration date against the corresponding strike prices of each contract. This representation underscores the fact that out-of-the-money (OTM) options must factor in a higher likelihood of extreme, market-moving events when compared to in-the-money (ITM) options, warranting a higher premium to be paid for the IV component of that contract.

OPTIONS GREEKS

Option greeks represent the sensitivity of the price of an options contract with respect to changes in its underlying parameters. Greeks are used in risk management & hedging so that market participants can achieve their desired exposure. Exchanges report the following greeks:

- Vega: The 1st derivative of an option's price to the volatility of the underlying asset's price.
- Theta: The 1st derivative of an option's price to the passage of time.
- Rho: The 1st derivative of an option's price to the risk free interest rate.
- Delta: The 1st derivative of an option's price to the underlying asset's price
- **Gamma:** The 2nd derivative of an option's price to the underlying asset's price.

DATA EXPLAINER (P.4)

MARKET CAPITALIZATION (MARKET CAP)

Market Capitalization (Market Cap) is an asset's on-chain supply (Coin Metrics' Current Supply) multiplied by its price. Current supply is the sum of all native units ever created (i.e., issued) and visible on the ledger.

Market cap is the most commonly used measure of a cryptoasset's total market value. However, market cap can be misleading because it treats each unit of supply equally. Unlike with traditional equities, significant amounts of cryptoassets are permanently lost or go unclaimed, yet are still counted as part of the on-chain supply.

FREE FLOAT MARKET CAP

The sum USD value of the free float supply. Also referred to as free float network value or free float market capitalization.

Free Float Market Capitalization is a measure of the market value of an asset's supply that is issued and available to market participants. This excludes supply that is held by company insiders, controlling investors, and long term strategic holders. Free Float Supply also excludes large token burn wallets and funds that have been provably lost.

REALIZED CAP

Realized cap is calculated by valuing each unit of supply at the price it last moved on-chain (i.e. the last time it was transacted). For example if a coin was last transacted three years ago when the price was \$2,500, that particular coin would be priced at \$2,500 instead of the current market price. The realized cap is the total sum of all coins priced this way.

Realized cap provides a more realistic representation of market cap and discounts coins that are lost or out of circulation.

MARKET TO REALIZED VALUE (MVRV)

MVRV is the ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

It can be used to help gauge cryptoasset market tops and bottoms. Historically, periods where Bitcoin's MVRV has dropped below 1.0 have coincided with market bottoms and in hindsight have been the best times to buy.

TOTAL STABLECOIN SUPPLY

Total Stablecoin Supply based on Coin Metrics' Current Supply, which reflects all native units ever created and visible on the ledger (i.e., issued). Tether supply includes Tether Omni, Tether ETH, and Tether Tron. Other Stablecoins include PAX, DAI, USDC, BUSD, GUSD, HUSD, TUSD, and SAI.

TETHER PREMIUM/DISCOUNT TO USD

30-day moving average of Tether's price YTD premium or discount to USD. Price represents Coin Metrics' Reference Rate, which is calculated using an independent methodology robust to manipulation. <u>More information</u> on Coin Metrics' Reference Rates.

MARKET CAPITALIZATION

See prior explanation.

TRANSFER VALUE, ADJUSTED

Transfer value is the total amount of a cryptoasset transferred over the course of a day, denominated in USD. We adjust raw transfer value to remove noisy "non-economic" behavior such as self-sends and spam.

TRANSACTION COUNT

Transaction count is the measure of the number of transactions either sent or received on a daily basis. Similar to active addresses it is a measure of network activity but it is susceptible to some spam and other types of manipulation.

MEDIAN TRANSFER VALUE

The median USD value transferred per transfer (i.e., the median "size" in USD of a transfer) between distinct addresses.

VELOCITY

The ratio of the value transferred (i.e., the aggregate "size" of all transfers) in the trailing 1 year divided by active supply in the trailing 1 year.

Velocity can be thought of as the rate of turnover— the number of times that an average native unit among the active supply has been transferred in the past 1 year.

DATA EXPLAINER (P.5)

MEMPOOL SIZE VS. FEE RATES

Coin Metrics' Mempool Monitor provides a full breakdown of what other network participants are willing to pay to have their transactions settled, thereby enabling precise fee estimation and settlement prediction. The chart showcases all feerate levels that have corresponding transactions in the mempool. For each feerate level, the total number of mempool transactions, as well as their size (in virtual bytes), are monitored.

BTC RECOMMENDED FEE RATE

The recommended minimum feerate required for a transaction to be included in the upcoming blockchain block. This metric accounts for situations where there are many transactions paying the minimum feerate by adding an additional cushion to the minimum estimate, providing better settlement guarantees.

BTC FEE TRENDS

The USD value of the mean and median fee per transaction that interval. Average fees per unit of blockspace (bytes and virtual bytes) are also calculated.

TRANSACTION COUNT PER BLOCK

The count of all transactions within the most recent block processed.

ETH GAS PRICES

The most recent block we processed within a 1-minute window is evaluated and its Base Fee and Priority Fees are captured. The concept of a Base Fee was introduced as part of EIP-1559 and it represents the portion of the total transaction fees that is destroyed and taken out of circulation (i.e. burnt). Ethereum post-1559 requires users to pay for a Base Fee as a prerequisite to include transactions in a block. The Base Fee can go up or down on the basis of the size (in gas units) of the previous block. The concept of a Priority Fee was introduced as part of EIP-1559 and it represents the portion of the total transaction fees that rewards validators. This serves as an added incentive so that validators prioritize transactions that have opted-in and paid a tip.

ETH FEE TRENDS

The USD value of the mean and median fee per transaction that interval. The sum gas used (i.e. paid) across all transactions and mean gas used (i.e. paid) per transaction that day are also captured.

NVT RATIO

The ratio of the network value (or market capitalization) to the 90-day moving average of the adjusted transfer value.

NVT uses native units network value and adjusted transaction volume. It is therefore available at the asset's genesis, unlike if it was using USD values. It can be thought of as a rough P/E (price to earnings) ratio proxy for crypto assets.

ACTIVE ADDRESSES

Active addresses is the unique number of addresses that either send or receive a transaction, calculated daily.

This metric can serve as a rough proxy for daily active users. However, it's not exact— a single user can have many addresses, and a single addresses can be owned by many users.

FREE FLOAT SUPPLY

Coin Metrics' free float supply takes many of the best practices from traditional capital markets and applies them to cryptoassets to identify supply that is highly unlikely to be available to the market in the short to mid-term. In doing so, free float supply provides a better approximation of a cryptoasset's liquidity and market capitalization compared to standard supply measurements. <u>More information</u> on Coin Metrics Free Float Supply.

TRANSACTION COUNT

See prior explanation.

TRANSFER VALUE, ADJUSTED

See prior explanation.

ADDRESSES WITH ≥ \$1

The count of addresses that hold at least \$1 worth of a cryptoasset. This gives a rough estimation of the amount of users that hold an asset, with the same caveats that apply for active addresses.

ADDRESSES WITH ≥ \$1M

The count of addresses that hold at least \$1M worth of a cryptoasset. This gives a rough estimation of the amount of institutional investors that hold an asset, with the same caveats that apply for active addresses.

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