

STATE OF THE MARKET

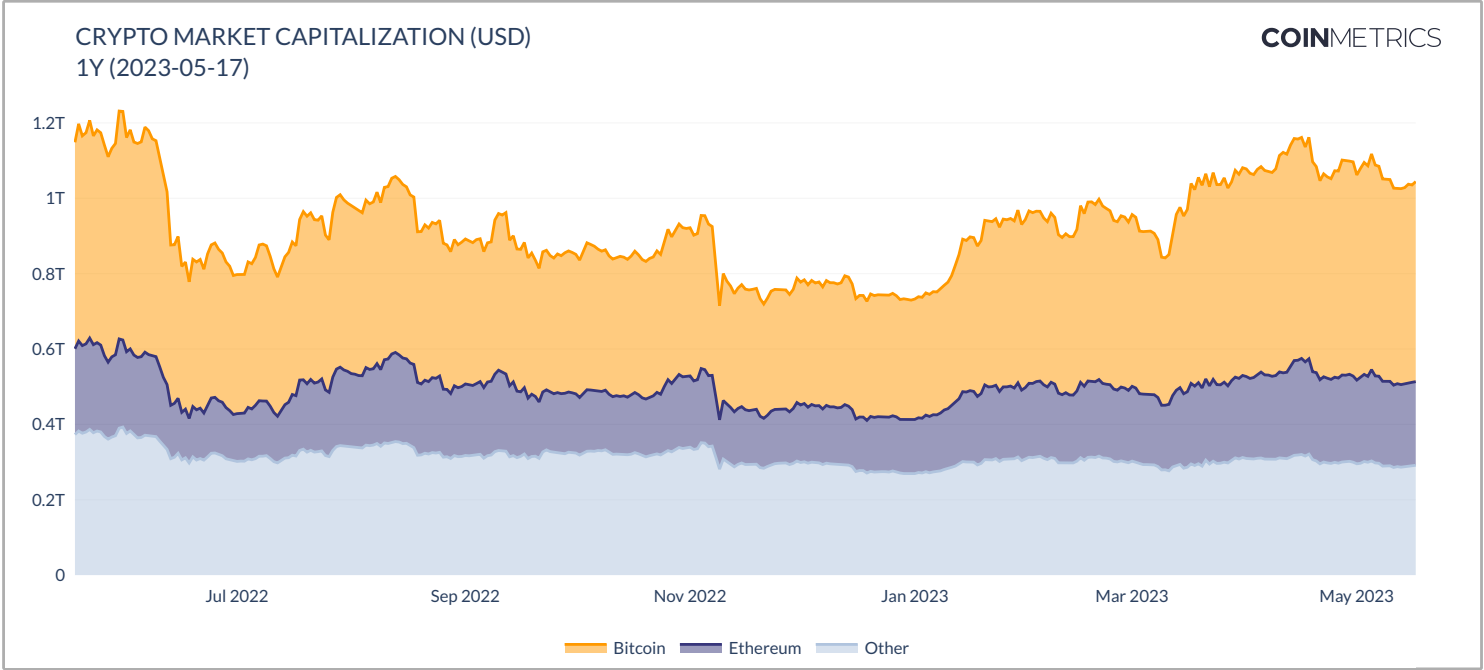
MAY 11 - 17, 2023

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



MARKET SUMMARY

Though "Mint the Coin" sounds like something you'd hear in crypto circles, the phrase is now a trending topic in U.S. Congress. The federal budget is at the mercy of a debt ceiling standoff, with the upper bound of U.S. spending capped at \$31.4T, and it remains unclear whether a compromise can be reached as the estimated deadline of June 1st quickly approaches. In response, the Biden admin is contemplating drastic measures, including minting a trillion-dollar coin, a clever (and somewhat comic) workaround for dodging a U.S. default. While a bipartisan resolution is clearly the preferred path, markets seem assured by Biden's commitment to maintaining the dollar's safe haven status, with Treasury yields rising as USD indices like DXY hold steady. In any case, USDC issuer Circle isn't taking chances, moving \$8.7B of reserves out of U.S. treasuries and into overnight repo agreements to provide additional protection "in the unlikely event of a U.S. debt default." Meanwhile, Circle's chief rival Tether is capitalizing on the windfall of elevated yields. After last week's report of a staggering \$1.48B profit in Q1, Tether committed to directing 15% of net profits towards additional BTC reserves, boosting their stack beyond the current value of \$1.5B. As the U.S. grapples with debt, the E.U. pushes forward with landmark legislation. On Tuesday, finance ministers from 27 member states unanimously greenlit the Markets in Crypto Assets (MiCA) framework, approving uniform regulation for a broad range of digital assets. In parallel, the world's largest exchange Binance is pulling back from North America. On Friday, the firm announced they'd be "joining other prominent crypto businesses" in withdrawing from Canada, citing 'new guidance' on stablecoins and other 'investor limits' as factors that made local operations untenable. Reports also indicate that CEO Changpeng Zhao is looking to cut his majority stake in Binance.US, supposedly to improve the unit's regulatory standing. Though last month's 'Shapella' upgrade was widely hailed as a success, Ethereum recently faced a series of unexpected issues with its proof-of-stake Consensus Layer. In normal operations, Ethereum transactions are considered "finalized" once 2/3 of validators approve the block. However, attestations were disrupted twice last week, with the 2nd incident taking roughly an hour to resolve. Devs quickly followed up with bug fixes for the Pryzm & Teku node clients, and the Ethereum Foundation reiterated the "exceptional" nature of the situation, attributing the glitch to a high load on the Consensus Layer. Indeed, the Beacon Chain is experiencing turbulent times, with leading liquid staking provider Lido Finance enabling withdrawals following the rollout of its Lido V2 upgrade on Monday. The Lido unlock has precipitated a massive influx of withdrawal requests, with more than \$780M in Staked Ether (stETH) soon headed for redemption by bankrupt lender Celsius Network. One year post-Terra collapse, a litany of failed crypto businesses continue to weigh heavily on market conditions, though narrative may have even bigger price impacts than the actual shifts in liquidity.



PRICE (CMBI CONSTITUENTS)

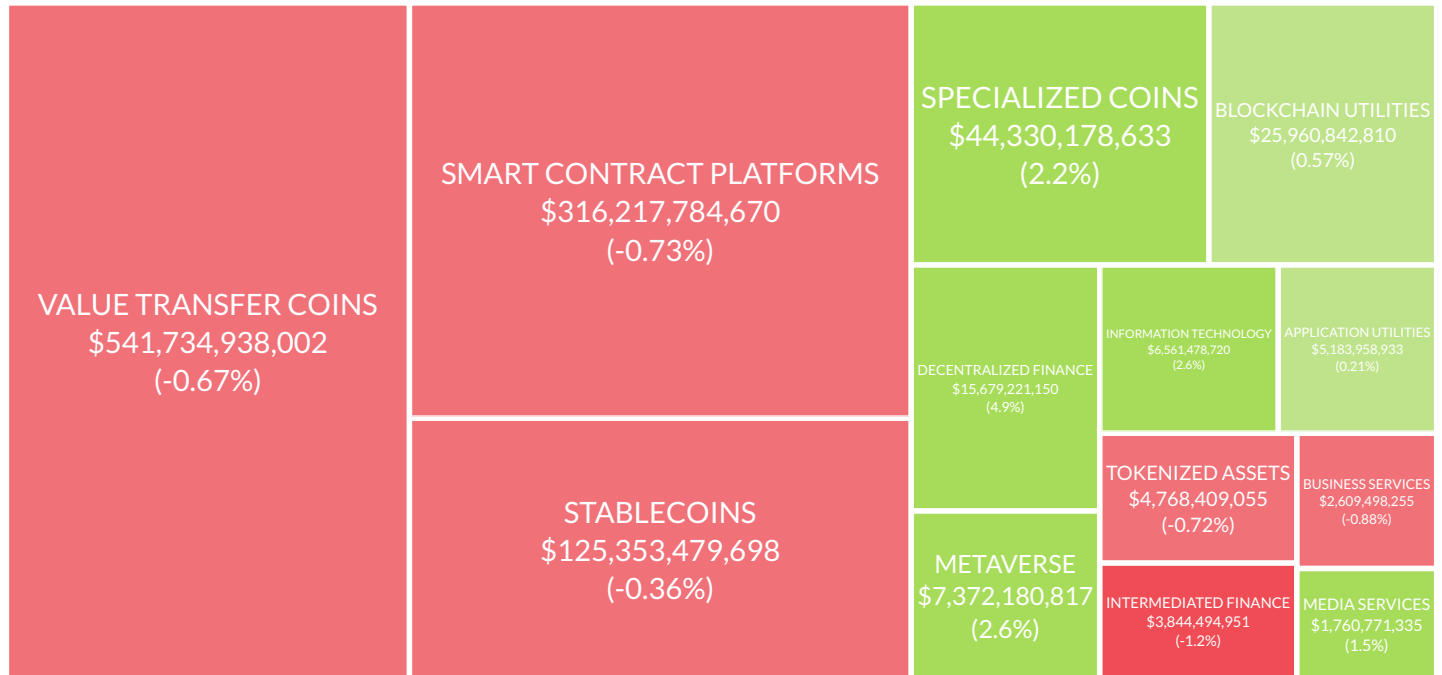
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
BTC	\$27,374.11	+1.86%	\$27,408.78	\$26,181.46	-8.69%	\$31,659.91	\$15,799.60
ETH	\$1,829.50	+2.42%	\$1,829.50	\$1,770.49	-8.28%	\$2,129.88	\$923.00
SOL	\$21.09	+5.28%	\$21.17	\$20.03	-59.37%	\$51.89	\$8.35
DOT	\$5.41	+3.03%	\$5.41	\$5.20	-45.84%	\$10.31	\$4.27
ADA	\$0.38	+7.16%	\$0.38	\$0.35	-28.12%	\$0.65	\$0.24
DOGE	\$0.08	+6.98%	\$0.08	\$0.07	-12.54%	\$0.14	\$0.05
MATIC	\$0.90	+6.95%	\$0.90	\$0.84	+38.90%	\$1.52	\$0.34
BNB	\$313.78	+2.49%	\$314.07	\$304.30	+3.24%	\$353.50	\$189.63
AVAX	\$15.22	+2.02%	\$15.22	\$14.80	-48.99%	\$31.04	\$10.78
ATOM	\$11.00	+0.82%	\$11.00	\$10.78	+3.41%	\$16.65	\$5.73
CMBI10	\$2,989.56	+2.31%	\$2,989.56	\$2,870.57	-11.77%	\$3,468.71	\$1,838.40

ASSET CLASSES

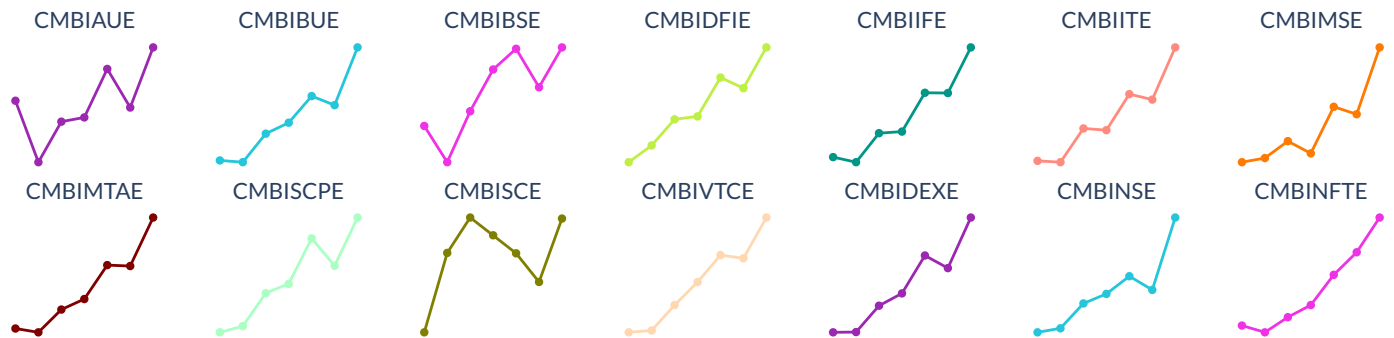
DIGITAL ASSET SECTOR 7D MARKETCAP (2023-05-17)

COINMETRICS



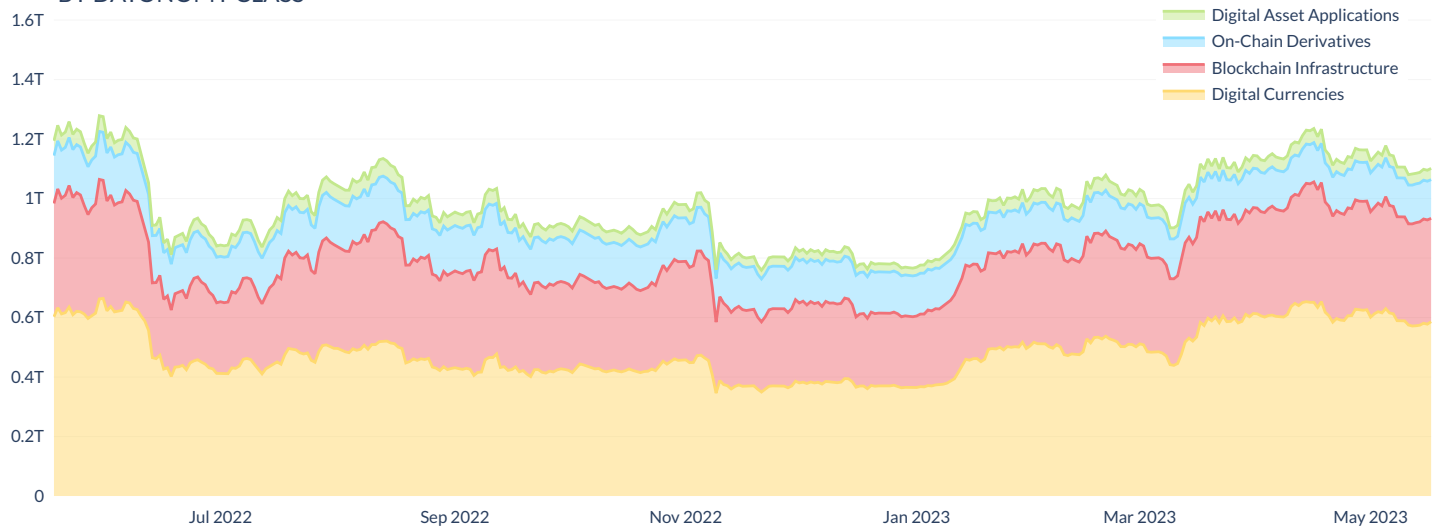
TRENDING SECTOR INDEXES, 7 DAY TREND

COINMETRICS



CRYPTO MARKET CAPITALIZATION (USD)
BY DATONOMY CLASS

COINMETRICS



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
CMBIBTC	\$27,373.34	+1.85%	\$27,408.30	\$26,184.24	-8.69%	\$31,659.91	\$15,799.60
CMBIBTCT	\$29,409.60	+1.85%	\$29,447.16	\$28,132.05	-8.69%	\$34,015.03	\$16,974.91
CMBIETH	\$1,829.43	+2.41%	\$1,829.43	\$1,770.51	-8.29%	\$2,129.88	\$923.00
CMBIETHH	\$1,986.02	+2.41%	\$1,986.02	\$1,922.06	-8.29%	\$2,312.19	\$1,002.00

CMBI BITCOIN
1Y (2023-05-17)

COINMETRICS



CMBI ETHEREUM
1Y (2023-05-17)

COINMETRICS



TRENDING INDEXES, 7 DAY TREND

COINMETRICS

CMBISAND



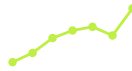
CMBISOL



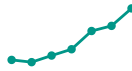
CMBIMANA



CMBIADA



CMBILTC



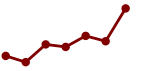
CMBILINK



CMBIEOS



CMBIXTZ



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	\$2,989.56	+2.31%	\$2,989.56	\$2,870.57	-11.77%	\$3,468.71	\$1,838.40
CMBI10E	\$4,928.21	+3.84%	\$4,928.21	\$4,731.02	-29.42%	\$7,041.38	\$3,409.70
CMBI10EX	\$6,835.97	+2.92%	\$6,835.97	\$6,598.69	-15.49%	\$8,167.41	\$4,169.19
CMBI10M	\$10,214.63	+0.00%	\$10,214.63	\$10,214.63	-34.15%	\$16,189.37	\$9,310.27
CMBIBE	\$14,306.90	+2.05%	\$14,317.23	\$13,739.88	-8.62%	\$16,180.78	\$8,387.96

CMBI 10
1Y (2023-05-17)

COINMETRICS



CMBI 10 MOMENTUM
1Y (2023-05-17)

COINMETRICS



MARKET MOVEMENT

TRADING DIARY, 7 DAY

ADVANCING VOLUME \$24,498,882,487

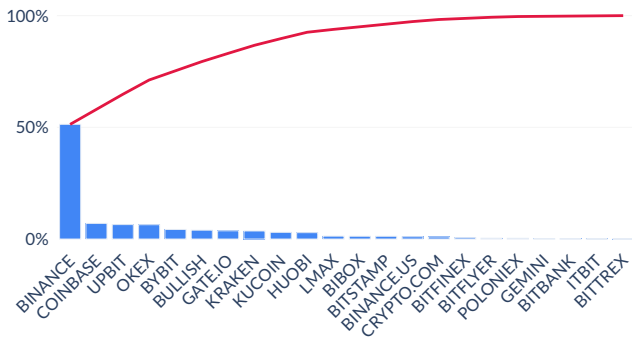
DECLINING VOLUME \$77,808,633,965

ADVANCES 277

DECLINES 371

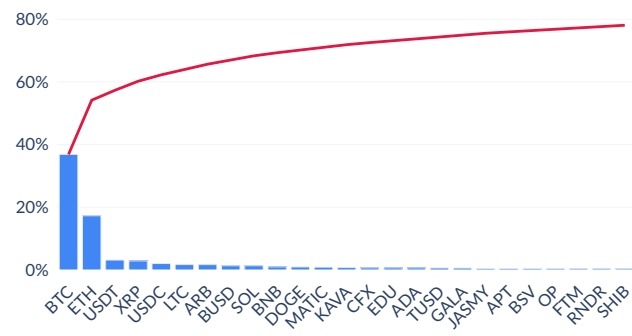
EXCHANGE SPOT SHARE, 7 DAY MEAN

COINMETRICS



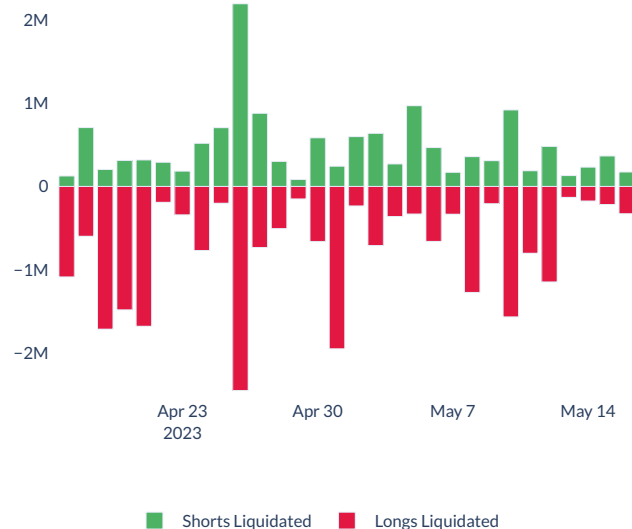
BASE ASSET SPOT SHARE, 7 DAY MEAN

COINMETRICS



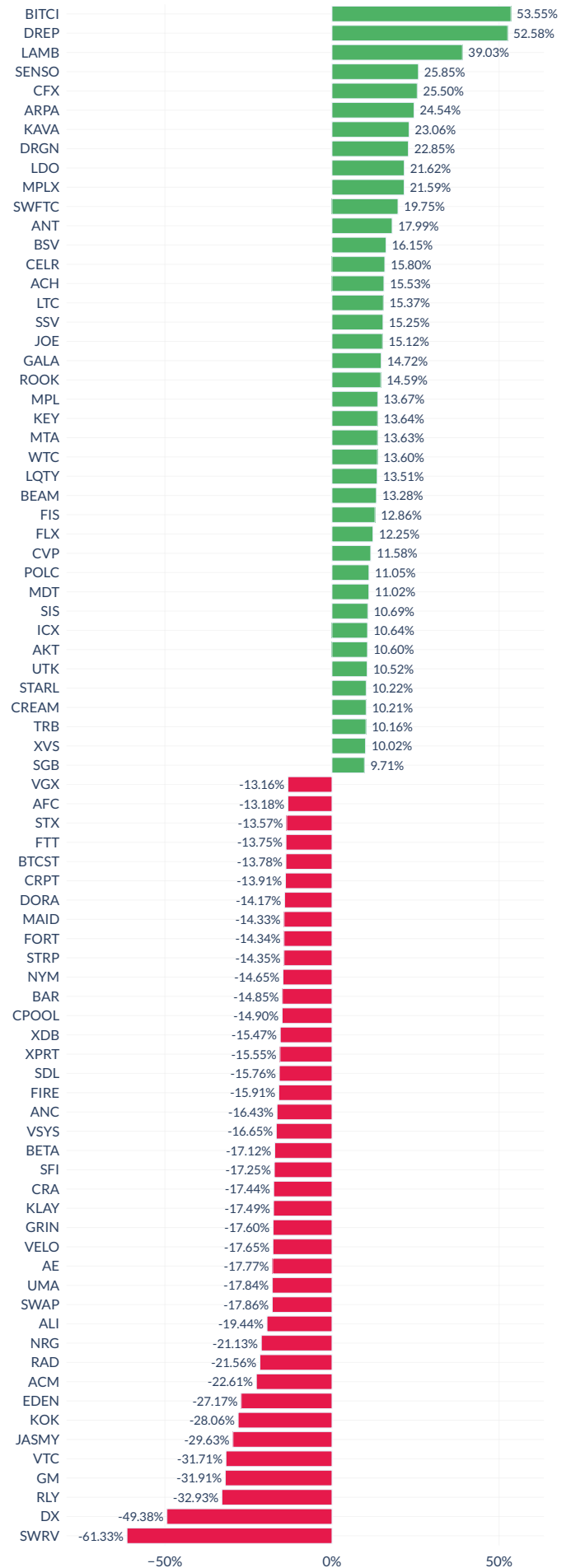
BTC PERPETUALS, TOTAL LIQUIDATIONS

COINMETRICS



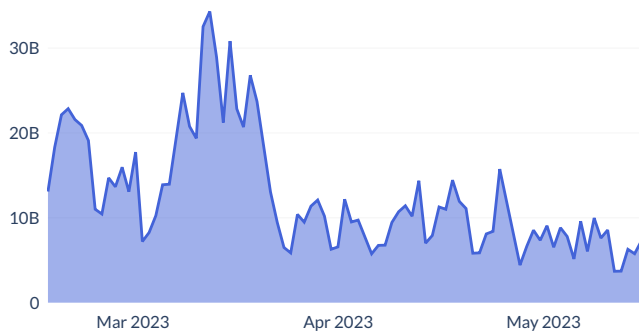
PRICE CHANGE, 7 DAY

COINMETRICS

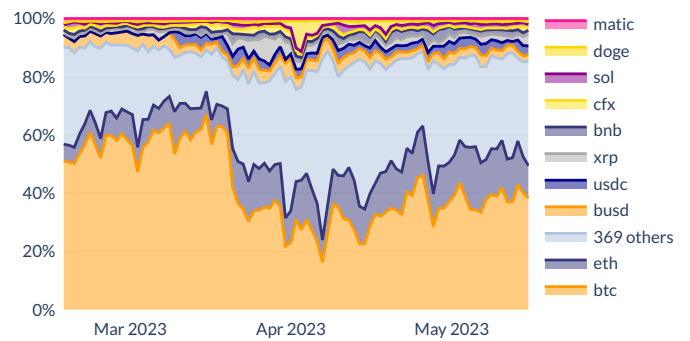


EXCHANGE SPOT VOLUME

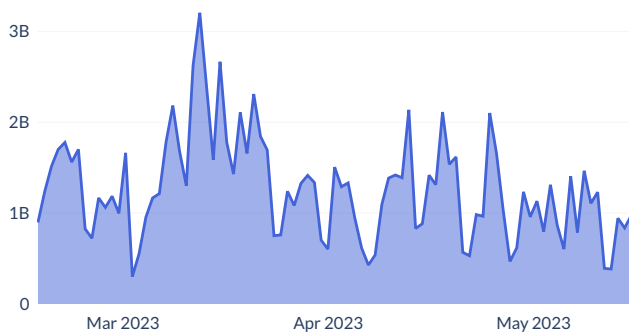
BINANCE DAILY USD SPOT VOLUME
3M (2023-05-17) COINMETRICS



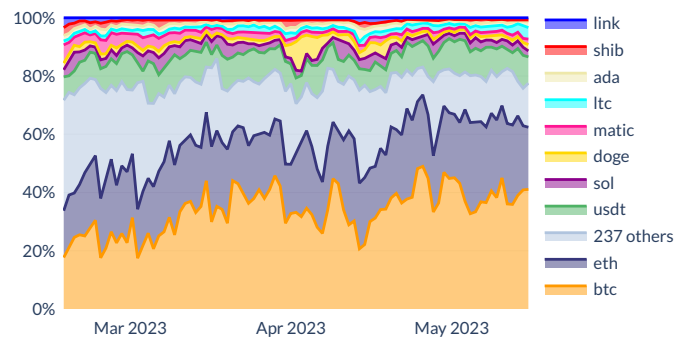
BINANCE SPOT VOLUME, % BY ASSET
3M (2023-05-17) COINMETRICS



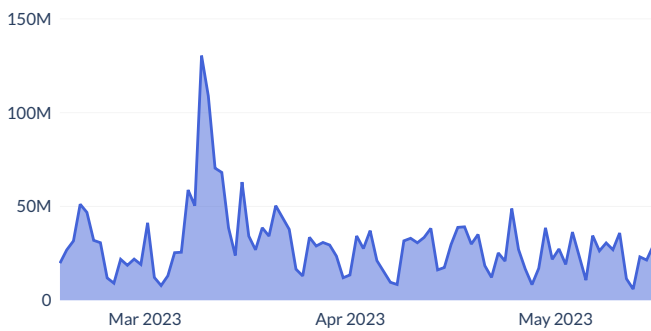
COINBASE DAILY USD SPOT VOLUME
3M (2023-05-17) COINMETRICS



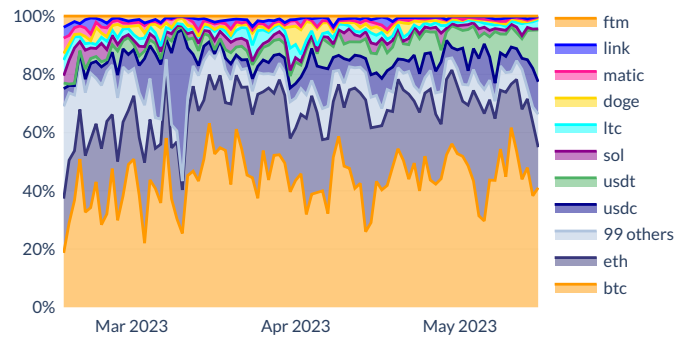
COINBASE SPOT VOLUME, % BY ASSET
3M (2023-05-17) COINMETRICS



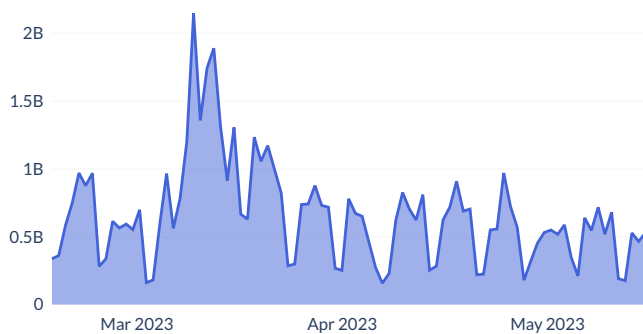
GEMINI DAILY USD SPOT VOLUME
3M (2023-05-17) COINMETRICS



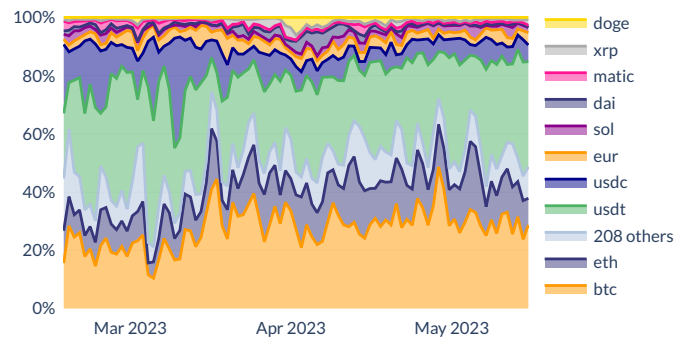
GEMINI SPOT VOLUME, % BY ASSET
3M (2023-05-17) COINMETRICS



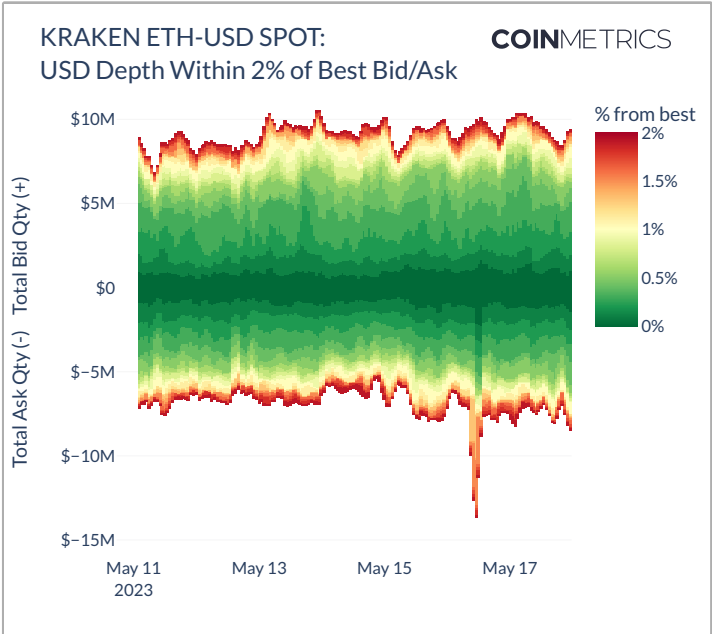
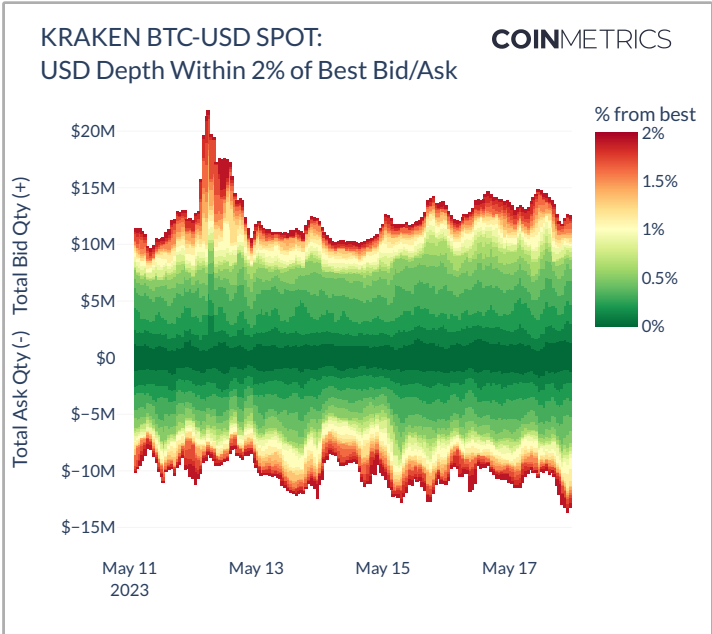
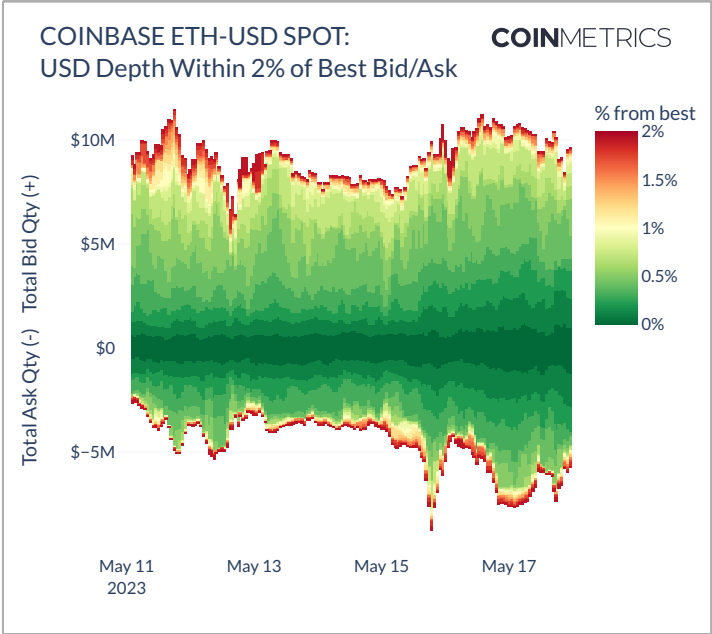
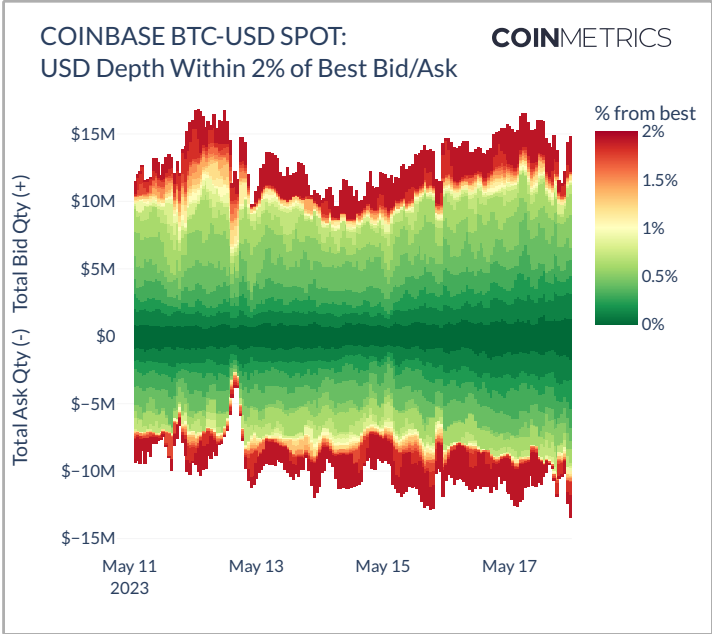
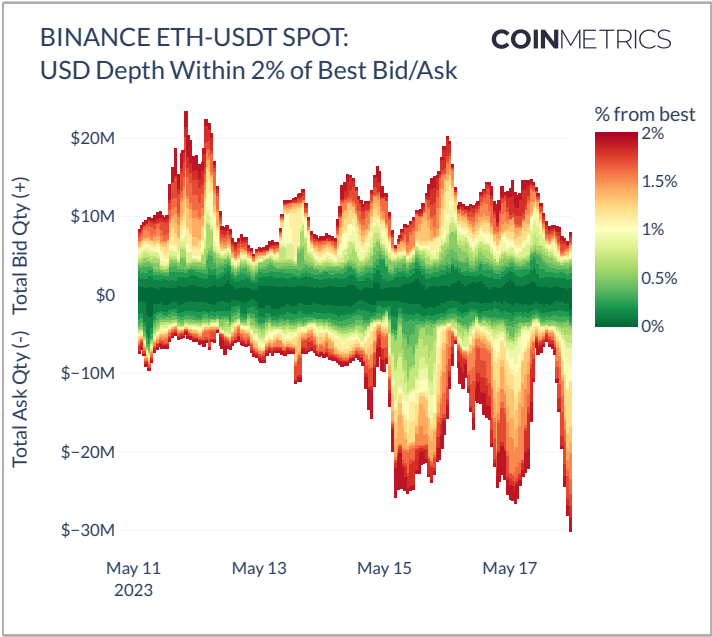
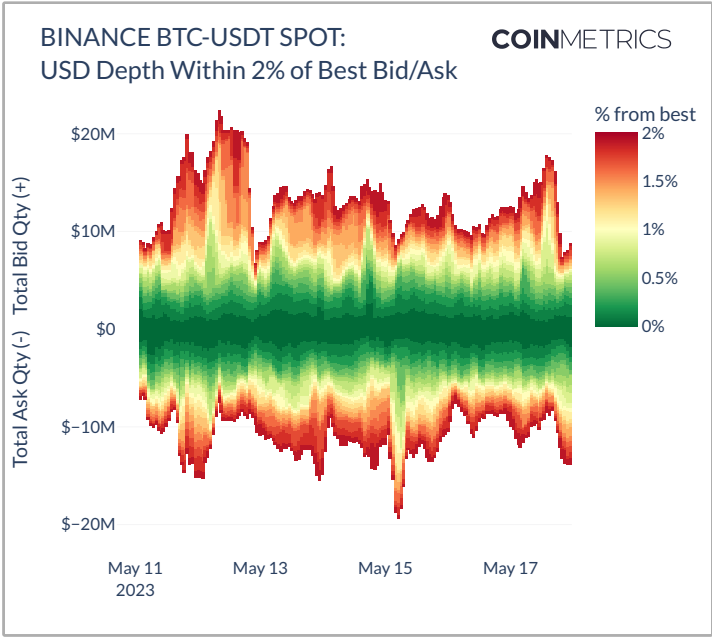
KRAKEN DAILY USD SPOT VOLUME
3M (2023-05-17) COINMETRICS



KRAKEN SPOT VOLUME, % BY ASSET
3M (2023-05-17) COINMETRICS



ORDER BOOK DEPTH



FUTURES FEED

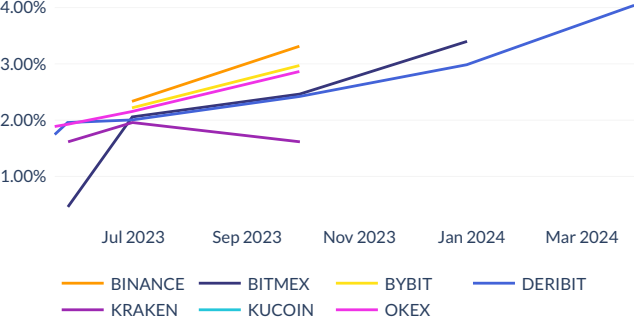
OPEN INTEREST 1Y (2023-05-17)

COINMETRICS



BTC USD DATED FUTURES BASIS

COINMETRICS



OPEN INTEREST

Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.69%	11,632,990,877	11,965,779,905	11,333,195,384
ETH	-8.06%	6,111,509,954	6,525,074,765	5,935,735,407
XRP	+27.40%	495,819,359	547,082,967	428,901,011
ADA	+6.03%	206,894,381	215,114,724	197,350,135
LTC	+52.25%	432,633,157	577,530,219	374,113,891
LINK	-2.24%	113,932,220	116,744,345	111,651,222
CRO	+42.26%	5,568,581	6,515,505	4,493,154
UNI	+3.65%	42,856,097	43,824,423	42,026,962
BCH	-0.79%	143,417,623	144,789,857	141,993,095

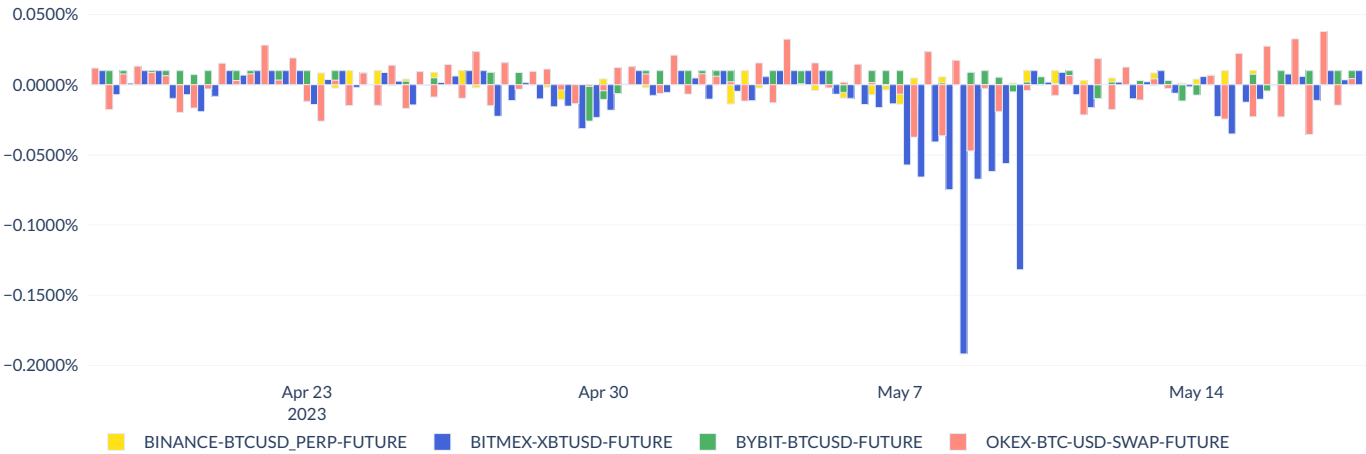
FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-8.56%	25,385,717,750	37,174,602,065	13,770,248,121
ETH	-19.17%	13,713,276,084	19,477,089,454	8,013,300,277
XRP	+148.42%	932,919,343	2,045,234,318	337,290,563
ADA	-1.99%	301,779,206	433,615,566	170,047,573
LTC	+129.86%	1,146,272,949	2,273,731,435	348,522,544
LINK	-2.65%	216,824,053	279,201,536	123,944,202
CRO	+20.76%	3,015,180	9,050,682	1,100,516
UNI	-19.80%	74,954,900	116,290,891	44,537,299
BCH	-38.47%	146,820,763	215,138,272	77,412,489

BTC FUTURES FUNDING RATES 1M (2023-05-17)

COINMETRICS



PERP OPEN INTEREST, 7 DAY TREND

COINMETRICS



NON-PERP OPEN INTEREST, 7 DAY TREND

COINMETRICS



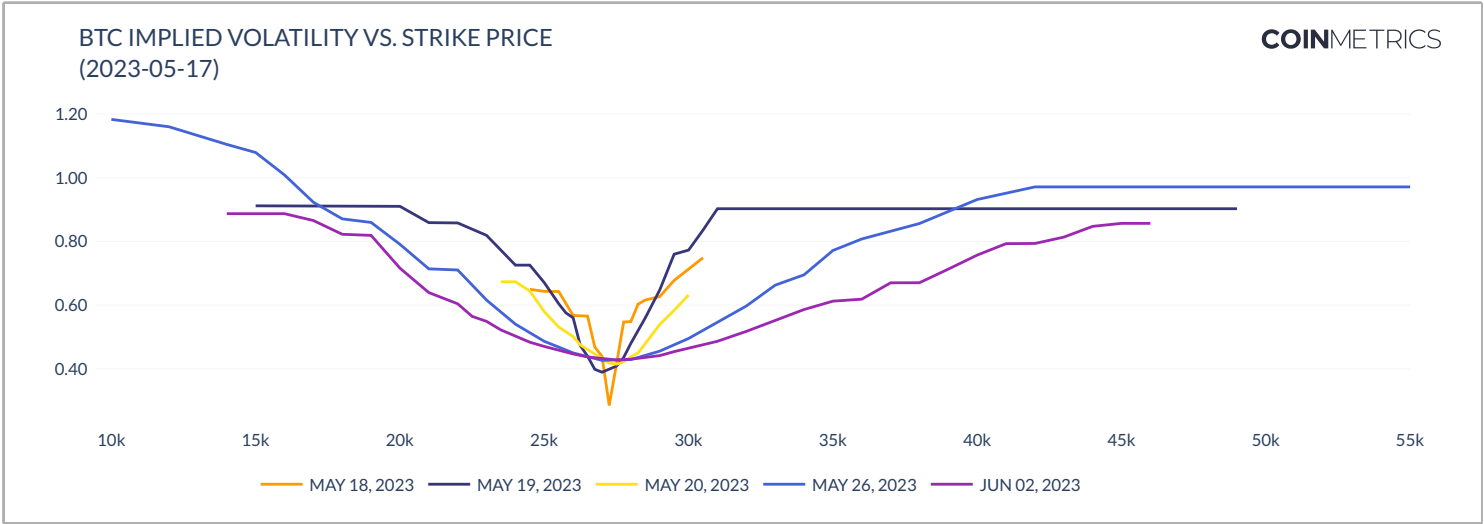
OPTIONS SNAPSHOT

BTC OPEN INTEREST

TOTAL	\$8,175,253,695
CALLS	\$5,643,357,959
PUTS	\$2,531,895,736

ETH OPEN INTEREST

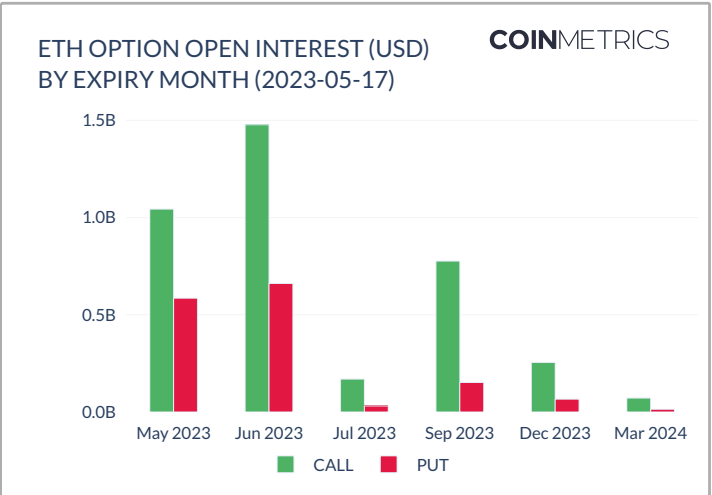
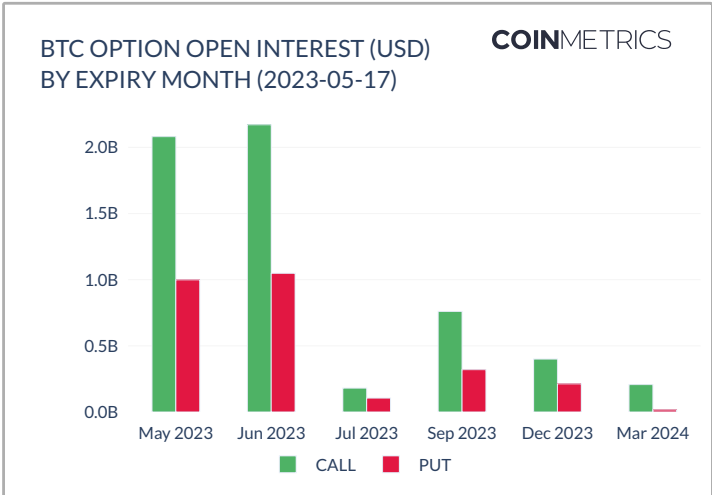
TOTAL	\$5,157,185,812
CALLS	\$3,713,205,455
PUTS	\$1,443,980,356



AT THE MONEY OPTIONS

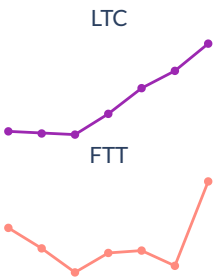
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

CALLS							PUTS							
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
7.66699	-70.31328	1.62818	0.76352	0.00023	0.5656	0.0331	BTC-18MAY23-26500	0.0002	0.5656	0.00023	-0.23675	-0.54951	-70.35482	7.67152
8.62605	-79.10873	1.50291	0.7014	0.00025	0.4654	0.0241	BTC-18MAY23-26750	0.0002	0.4654	0.00025	-0.29829	-0.69401	-79.0752	8.62239
9.35568	-85.8001	1.36383	0.63376	0.00028	0.4375	0.0156	BTC-18MAY23-27000	0.0009	0.4375	0.00028	-0.36624	-0.85432	-85.8001	9.35568
6.74836	-84.13709	0.88107	0.68016	0.00041	0.4644	0.043	BTC-19MAY23-26250	0.0007	0.4644	0.00041	-0.31984	-0.43692	-84.13709	6.74836
21.88289	-27.35447	11.5072	0.764	0.00008	0.443	0.0344	BTC-19MAY23-26500	0.0013	0.443	0.00008	-0.236	-4.4649	-27.35447	21.88289
7.477	-90.66153	0.59137	0.45276	0.00047	0.4208	0.0263	BTC-19MAY23-26750	0.0023	0.4207	0.00047	-0.54724	-0.75172	-90.66153	7.477
23.93787	-29.92329	10.94063	0.71948	0.00009	0.4109	0.019	BTC-19MAY23-27000	0.0041	0.4109	0.00009	-0.28069	-5.3358	-29.93003	23.94327
8.67499	-79.55755	1.43261	0.68229	0.00027	0.4961	0.045	BTC-20MAY23-26250	0.0027	0.4961	0.00027	-0.31771	-0.72393	-79.55755	8.67499
9.3241	-85.51053	1.2897	0.61163	0.00029	0.476	0.037	BTC-20MAY23-26500	0.0039	0.476	0.00029	-0.38837	-0.88737	-85.51053	9.3241
9.66257	-88.61463	1.13891	0.53808	0.0003	0.4613	0.0296	BTC-20MAY23-26750	0.0056	0.4613	0.0003	-0.46207	-1.05904	-88.61617	9.66274



MARKET CAPITALIZATION

MARKET CAPITALIZATION, 7 DAY TREND



COINMETRICS
LTC

FTT

MARKET CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.57%	523,573,512,355	530,931,006,408	518,638,152,373
ETH	+1.61%	220,341,242,053	222,169,730,112	218,429,620,527
XRP	+6.41%	43,126,065,825	44,838,735,159	42,137,604,338
ADA	+4.41%	12,551,105,877	12,804,249,517	12,263,718,614
LTC	+16.35%	6,207,775,293	6,851,471,317	5,852,929,079
LINK	+6.24%	6,584,251,361	6,757,171,007	6,360,553,775
CRO	+1.08%	6,341,575,288	6,415,721,208	6,257,335,141
UNI	+4.77%	5,158,656,567	5,311,379,594	5,069,793,498
BCH	+4.04%	2,238,408,925	2,289,048,957	2,193,395,082
FTT	+3.53%	362,652,929	379,743,762	354,396,099

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.32%	372,750,802,789	377,193,492,457	369,373,345,188
ETH	+1.66%	201,911,426,450	203,627,393,814	200,108,611,942
XRP	+6.52%	19,629,210,236	20,411,172,499	19,162,476,412
ADA	+4.46%	11,108,566,169	11,337,936,340	10,853,453,452
LTC	+16.00%	5,359,577,662	5,903,223,840	5,057,625,753
LINK	+6.24%	3,333,693,998	3,421,290,250	3,220,474,849
CRO	-0.60%	765,948,576	777,891,232	758,699,833
UNI	+8.04%	1,206,594,912	1,275,268,560	1,180,347,905
BCH	+4.03%	1,516,120,459	1,550,326,683	1,485,729,288
FTT	+3.53%	349,831,921	366,318,536	341,866,998

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
BTC	+0.20%	389,866,763,641	390,337,943,467	389,547,682,940
ETH	-0.84%	164,877,186,071	165,367,329,130	163,984,978,694
XRP	+0.09%	48,967,917,988	49,004,540,731	48,945,370,072
ADA	+0.04%	17,659,254,607	17,674,584,936	17,646,299,892
LTC	+0.40%	6,880,026,431	6,899,557,439	6,870,521,702
LINK	+0.13%	8,267,401,720	8,270,619,461	8,259,607,576
CRO	+0.12%	22,261,769,334	22,282,870,572	22,254,887,786
UNI	-1.30%	8,832,197,147	8,851,910,244	8,732,077,852
BCH	-0.13%	4,292,651,334	4,295,129,198	4,289,329,759
FTT	-3.33%	885,602,137	912,013,441	879,612,381

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
BTC	+1.36%	1.34	1.36	1.33
ETH	+2.47%	1.34	1.35	1.32
XRP	+6.32%	0.88	0.91	0.86
ADA	+4.37%	0.71	0.72	0.69
LTC	+15.89%	0.90	0.99	0.85
LINK	+6.09%	0.80	0.82	0.77
CRO	+0.96%	0.28	0.29	0.28
UNI	+6.15%	0.58	0.61	0.57
BCH	+4.18%	0.52	0.53	0.51
FTT	+7.10%	0.41	0.43	0.40

COINMETRICS

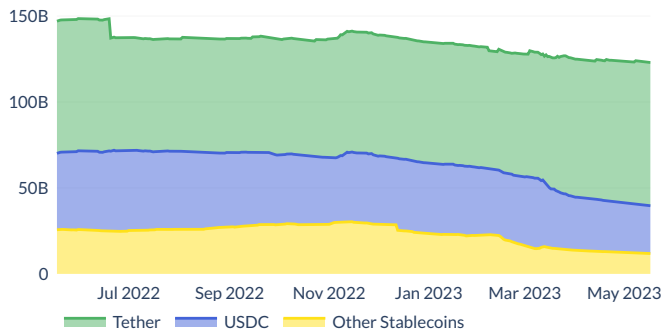
MARKET VALUE TO REALIZED VALUE 1Y (2023-05-17)



STABLECOINS REPORT

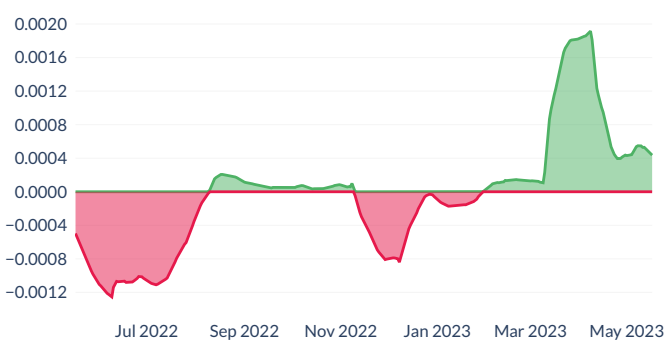
TOTAL STABLECOINS SUPPLY
1Y (2023-05-17)

COINMETRICS



TETHER PREMIUM/DISCOUNT TO USD
1Y (2023-05-17)

COINMETRICS



MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.03%	36,294,493,818	36,301,135,225	36,285,371,250
USDT	-0.03%	888,276,683	888,439,226	888,053,416
USDT_TRX	-0.03%	46,147,014,898	46,155,459,183	46,135,415,912
PAX	-0.14%	1,056,090,428	1,060,502,899	1,052,718,528
DAI	-0.31%	4,668,988,538	4,682,601,918	4,663,503,407
USDC	-1.69%	28,132,320,691	28,289,011,095	27,811,304,926
BUSD	-2.86%	5,602,435,284	5,708,187,666	5,544,967,259
GUSD	+2.88%	573,897,777	578,261,483	562,090,359

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-11.67%	2,586,099,165	3,693,757,611	872,725,567
USDT	+2,285.20%	112,825	215,043	8,241
USDT_TRX	-6.32%	9,173,615,980	10,616,996,568	5,410,940,946
PAX	+37.61%	53,535,025	79,411,814	12,279,797
DAI	-33.68%	223,147,335	444,689,106	63,967,964
USDC	+32.56%	2,547,890,916	4,014,978,614	668,277,577
BUSD	-91.14%	95,997,113	399,389,985	5,673,141
GUSD	-89.20%	11,998,699	33,384,486	117,150

MARKET CAPITALIZATION, 7 DAY TREND

COINMETRICS



TRANSFER VALUE, 7 DAY TREND

COINMETRICS



TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-2.32%	89,735	104,537	67,819
USDT	-53.85%	39	177	10
USDT_TRX	+3.58%	2,284,837	2,513,036	1,928,989
PAX	+52.27%	104	145	55
DAI	+102.12%	4,233	6,911	2,648
USDC	+23.87%	32,013	39,408	22,665
BUSD	-24.52%	513	649	423
GUSD	+102.61%	114	233	50

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-3.29%	836	1,000	500
USDT	-36.02%	1,235	4,171	80
USDT_TRX	-9.18%	107	117	100
PAX	+509.17%	40,086	181,992	2,381
DAI	-63.95%	1,470	2,774	978
USDC	-50.80%	1,388	2,177	935
BUSD	-58.42%	506	944	300
GUSD	+178.58%	2,275	10,989	407

VELOCITY

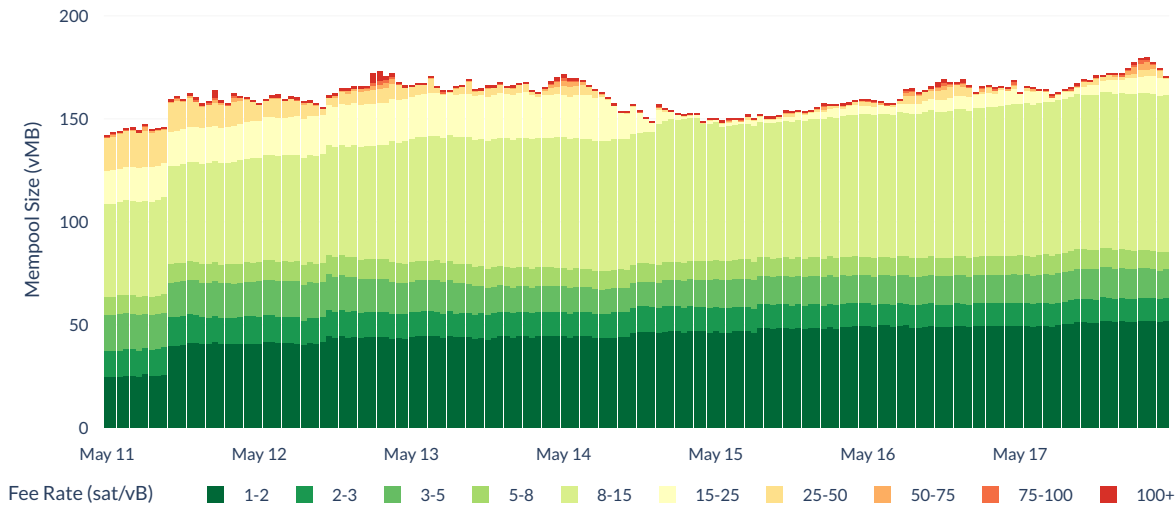
Number of times that an average native unit among the active supply has been transferred in the past 1 year

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-3.50%	39.26	40.24	38.83
USDT	-0.61%	3.06	3.08	3.06
USDT_TRX	-1.19%	59.76	60.44	59.50
PAX	-0.64%	14.20	14.39	14.12
DAI	-0.93%	268.39	269.81	267.29
USDC	-0.08%	124.78	125.57	124.04
BUSD	-0.96%	49.07	49.45	48.65
GUSD	-8.98%	11.88	12.47	11.35

FEE MARKET

BTC MEMPOOL SIZE VS. FEE RATES
(2023-05-17)

COINMETRICS



COINMETRICS
BTC FEE TRENDS

AVG. USD FEE



MED. USD FEE



AVG. FEE / BYTE

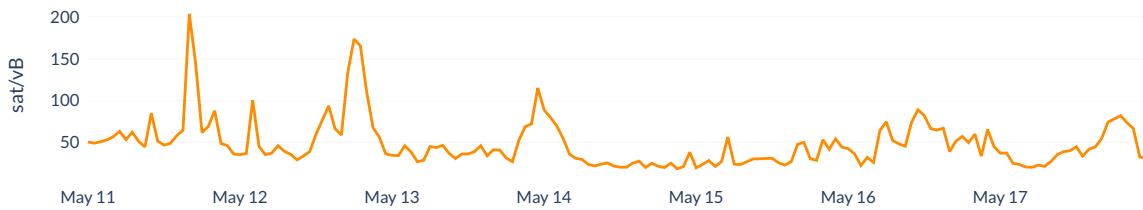


AVG. FEE / WEIGHT



BTC RECOMMENDED FEE RATE
(1H AVERAGE)

COINMETRICS



COINMETRICS
ETH FEE TRENDS

AVG. USD FEE



MED. USD FEE



DAILY GAS USED

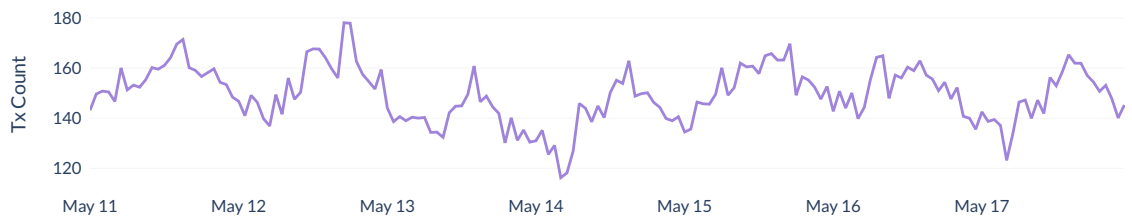


AVG. GAS USE / TX



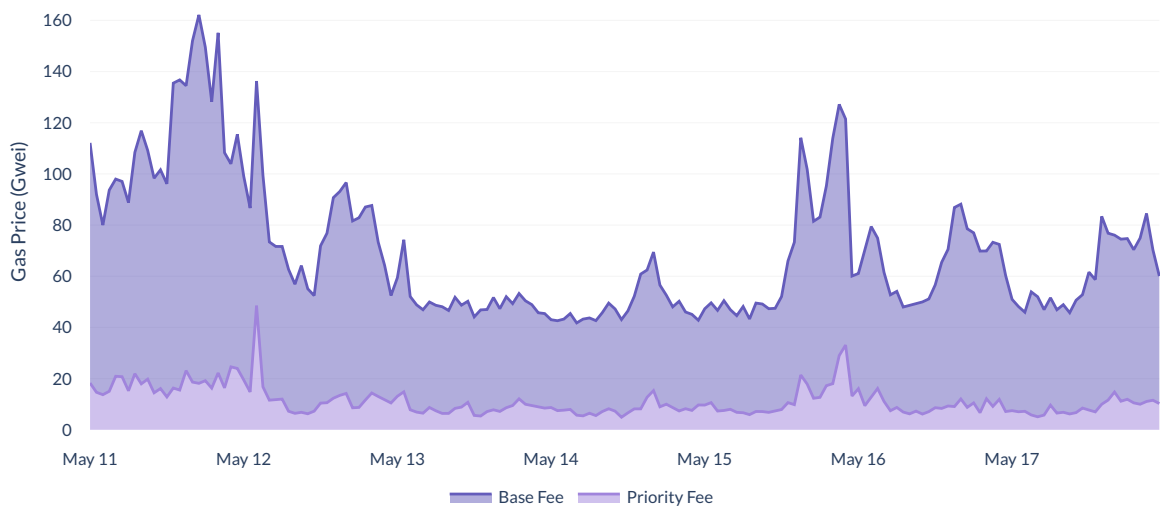
ETH TRANSACTION COUNT PER BLOCK
(1H AVERAGE)

COINMETRICS



ETH BASE & PRIORITY FEES
(1H AVERAGE)

COINMETRICS



NETWORK DATA FUNDAMENTALS

NVT RATIO (90D MA)
1Y (2023-05-17)

COINMETRICS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.23%	807,880	841,652	705,679
ETH	+8.30%	465,038	517,669	410,161
XRP	+21.74%	34,952	85,641	24,357
ADA	-24.65%	51,538	65,933	40,566
LTC	-18.04%	667,789	745,255	535,299
LINK	-0.89%	1,574	2,079	1,314
CRO	+50.56%	302	402	240
UNI	+37.68%	646	760	551
BCH	-33.05%	68,755	122,001	27,720
FTT	-12.79%	78	123	52

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-0.22%	13,792,680	13,798,775	13,765,661
ETH	+0.17%	111,564,143	111,636,726	111,444,351
XRP	+0.10%	45,510,668,495	45,518,805,765	45,470,885,800
ADA	+0.11%	30,186,644,181	30,212,339,741	30,176,382,550
LTC	-0.24%	62,961,645	63,018,614	62,843,534
LINK	+0.00%	506,313,261	506,322,853	506,303,286
CRO	-1.66%	12,078,370,455	12,125,039,283	11,923,463,456
UNI	+3.13%	233,866,335	240,101,190	232,819,720
BCH	+0.02%	13,134,244	13,135,337	13,133,138
FTT	+0.00%	317,267,550	317,267,550	317,267,550

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+6.45%	561,877	626,942	508,450
ETH	-5.10%	1,052,212	1,099,638	992,354
XRP	+24.84%	1,076,360	1,295,635	852,160
ADA	-23.99%	65,143	84,018	54,315
LTC	-26.27%	437,986	508,624	344,796
LINK	-3.37%	1,647	2,180	1,314
CRO	+75.64%	365	548	257
UNI	+66.10%	718	887	534
BCH	-67.95%	53,327	123,418	11,291
FTT	+6.80%	93	183	43

ADDRESSES ≥ \$1

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.58%	39,532,503	39,660,230	39,430,496
ETH	+0.85%	58,273,664	58,511,292	58,020,422
XRP	+0.12%	4,702,838	4,705,669	4,700,170
ADA	+0.63%	3,590,609	3,601,449	3,578,919
LTC	+2.46%	2,275,290	2,304,431	2,249,144
LINK	+0.16%	508,600	508,992	508,172
CRO	+0.16%	150,958	151,077	150,809
UNI	+0.16%	294,857	295,144	294,681
BCH	+1.28%	3,970,260	3,998,038	3,947,630
FTT	+0.30%	20,548	20,655	20,498

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

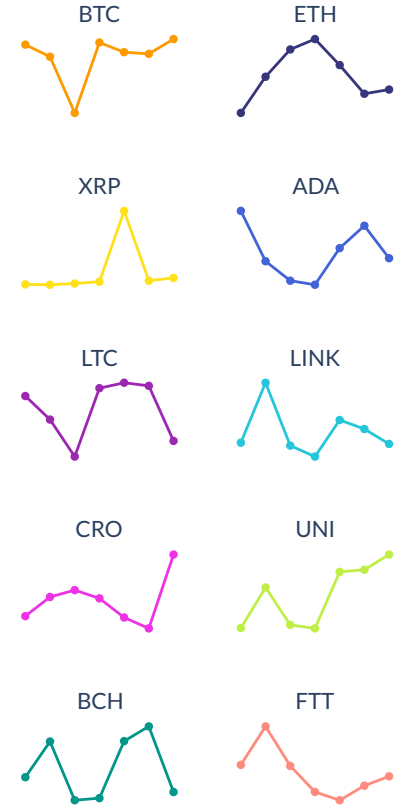
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.41%	3,146,004,626	4,088,808,174	1,849,618,489
ETH	+11.81%	3,155,079,272	4,664,292,862	1,435,204,417
XRP	+4.02%	436,155,242	636,942,495	121,259,211
ADA	+4.50%	8,257,526,270	9,428,388,326	6,995,032,638
LTC	+27.13%	108,833,528	137,506,434	82,110,586
LINK	+66.49%	23,630,221	39,449,885	6,398,911
CRO	+720.60%	3,491,273	8,537,645	1,040,419
UNI	+2,115.04%	14,126,746	64,570,082	2,725,358
BCH	-14.22%	12,124,650	14,441,125	6,798,352
FTT	+63.91%	954,112	3,458,368	283,689

ADDRESSES ≥ \$1M

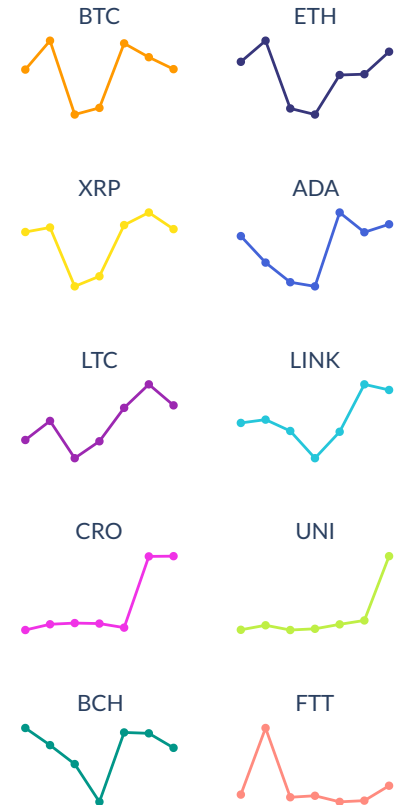
Count of addresses holding at least \$1M worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.55%	71,472	71,838	71,241
ETH	-0.33%	10,778	10,819	10,746
XRP	+3.51%	1,010	1,032	997
ADA	+3.22%	981	994	963
LTC	+9.23%	480	509	464
LINK	+5.15%	338	347	330
CRO	+3.64%	55	57	53
UNI	+3.60%	280	288	277
BCH	+3.27%	217	221	214
FTT	+7.69%	14	14	13

COINMETRICS
ACTIVE ADDRESSES, 7 DAY TREND



COINMETRICS
TRANSFER VALUE, 7 DAY TREND



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™, 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. [More info](#) 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 5/14/2023 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 5/14/2023 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 liquidity 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 [Data Encyclopedia](#).

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 [futures basis metrics](#) 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 [Data Encyclopedia](#).

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 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. [More information](#) 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. [More information](#) on Coin Metrics Free Float Supply.

TRANSACTION COUNT

See prior explanation.

TRANSFER VALUE, ADJUSTED

See prior explanation.

ADDRESSES WITH $\geq \$1$

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 $\geq \$1M$

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.