

STATE OF THE MARKET

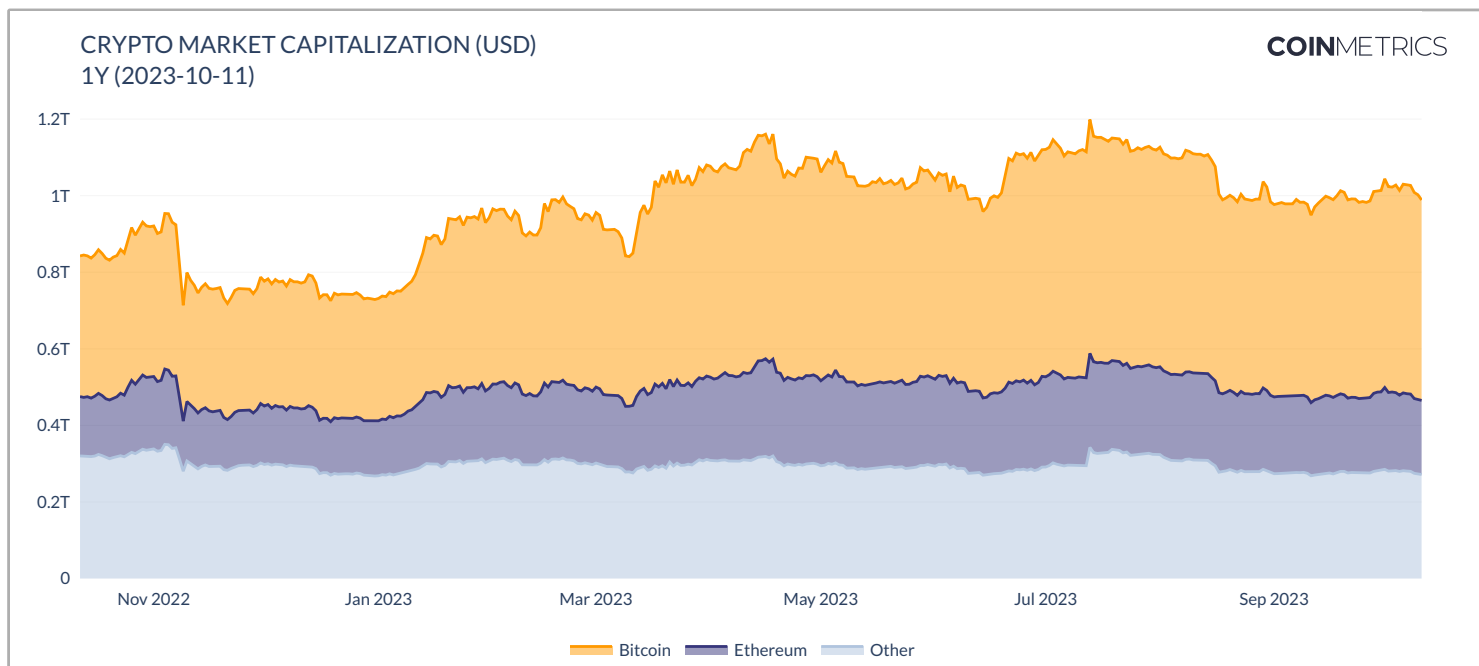
OCT. 5 - 11, 2023

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

CM

MARKET SUMMARY

An abrupt conflict between Israel and Hamas has heightened fears about the destabilization of geopolitical order. After being caught off-guard in a violent ambush, the government of Israel has retaliated fiercely, from executing airstrikes to freezing digital assets. On Tuesday, Israeli police reported they— with the help of Binance— took control of multiple Hamas-linked crypto wallets, diverting "funds to the state treasury." As investors sought cover, U.S. treasuries became the safe haven vehicle of choice. After a holiday weekend void of price discovery, capital allocators hurried to factor in effects of war, with 10-year T-bill yields dropping 16 bps on Tuesday. This demand for treasuries came despite higher-than-expected wholesale inflation levels, with the Labor Dept. reporting a Producer Price Index (PPI) increase of 0.5% against 0.3% estimates. Sam Bankman-Fried continues to subsume the crypto conversation, with a torrent of revelations & accusations coming out in witness testimony. Government prosecutors wrapped up their questioning of ex-Alameda chief Caroline Ellison on Wednesday, exposing the high level of day-to-day involvement Sam had in directing fraud. The biggest turning point came when Bankman-Fried instructed Ellison to "use FTX customer funds to repay our loans," with Alameda's lenders calling in billions in open-term borrows throughout Spring 2022. Voyager ex-CEO Stephen Ehrlich may be the next to face the music. The CFTC is reportedly weighing enforcement action against the former lead of the bankrupt lender, alleging Ehrlich violated derivatives rules by misleading customers about the safety of their assets. Ehrlich pleads innocent, claiming the entire industry was "all scammed together" and the CFTC is "making new rules and calling foul after the game has ended." Solana users saw a meaningful leap forward in privacy with the version 1.16 update of the blockchains's validator client. The upgrade introduces "Confidential Transfers," enhancing user privacy with native Zero-Knowledge Proof capabilities enabled by 'highly efficient' elliptic curve cryptography. The Bitcoin community is optimistically eyeing their own enhancements, with a new research paper proposing a protocol for Turing-complete smart contracts called "BitVM." By leveraging Bitcoin's Taproot upgrade, users can theoretically execute "more expressive smart contracts" off-chain, all within the existing confines of Bitcoin script. Despite technological progress, crypto winter remains cold and unforgiving. Late last week, hardware giant Ledger let go off 12% of their staff, citing "macroeconomic headwinds." A day later, Yuga Labs— the NFT startup behind Bored Ape Yacht Club & CryptoPunks— announced layoffs, cutting an undisclosed number of U.S. team members amid a broader effort to refocus resources. Looking ahead, we're due for a decision on the Grayscale v. SEC lawsuit on Friday the 13th. The SEC will be forced to voice whether they'll appeal the court's damning disapproval of their blockade of a GBTC-to-ETF conversion. With \$17B sitting in the Grayscale Bitcoin Trust— and billions more knocking at the door— the imminent integration of exchange-traded products promises a major injection of much-needed liquidity.



PRICE (CMBI CONSTITUENTS)

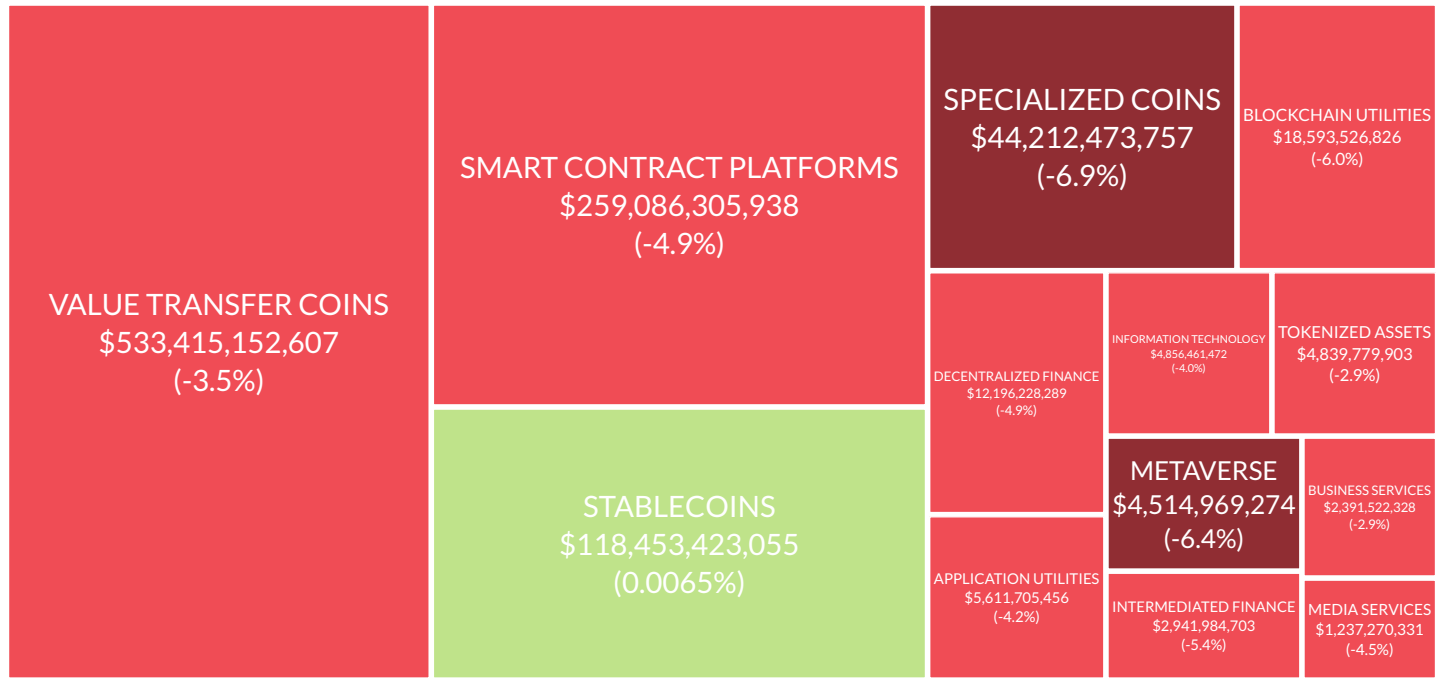
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
BTC	\$26,735.08	-2.74%	\$27,973.49	\$26,735.08	+38.06%	\$31,644.02	\$15,799.60
ETH	\$1,561.61	-3.40%	\$1,649.08	\$1,561.61	+21.36%	\$2,129.88	\$1,103.83
SOL	\$21.88	-3.77%	\$23.51	\$21.88	-28.45%	\$36.57	\$8.35
ADA	\$0.25	-6.08%	\$0.27	\$0.25	-34.41%	\$0.45	\$0.24
DOGE	\$0.06	-4.99%	\$0.06	\$0.06	-2.44%	\$0.14	\$0.06
TRX	\$0.09	-2.92%	\$0.09	\$0.09	+40.72%	\$0.09	\$0.05
BNB	\$205.97	-2.40%	\$213.69	\$205.97	-24.24%	\$353.50	\$204.88
AVAX	\$9.34	-8.05%	\$10.68	\$9.34	-40.38%	\$22.04	\$8.82
LINK	\$7.33	-2.43%	\$7.71	\$7.25	+4.62%	\$9.12	\$5.09
XLM	\$0.10	-7.32%	\$0.11	\$0.10	-8.82%	\$0.17	\$0.07
CMBI10	\$2,712.72	-3.05%	\$2,848.18	\$2,712.72	+22.37%	\$3,398.54	\$1,838.40

ASSET CLASSES

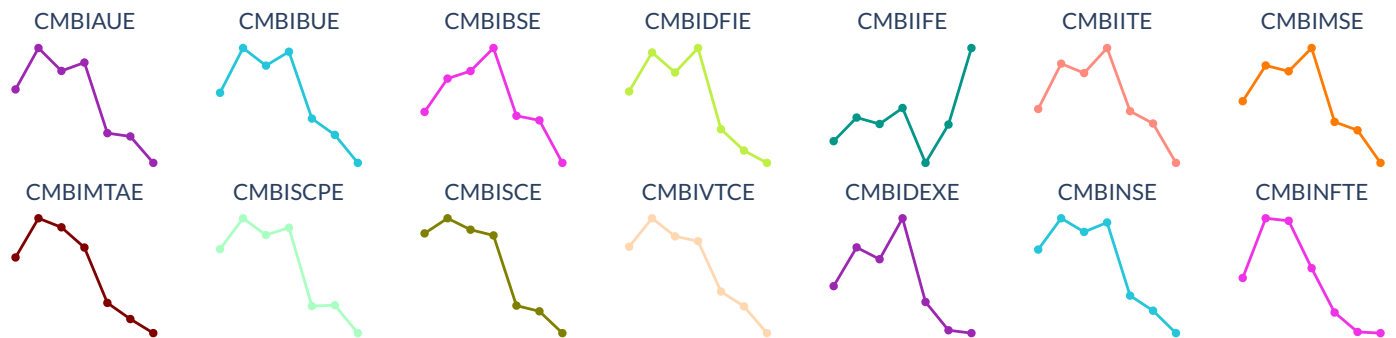
DIGITAL ASSET SECTOR 7D MARKETCAP (2023-10-11)

COINMETRICS



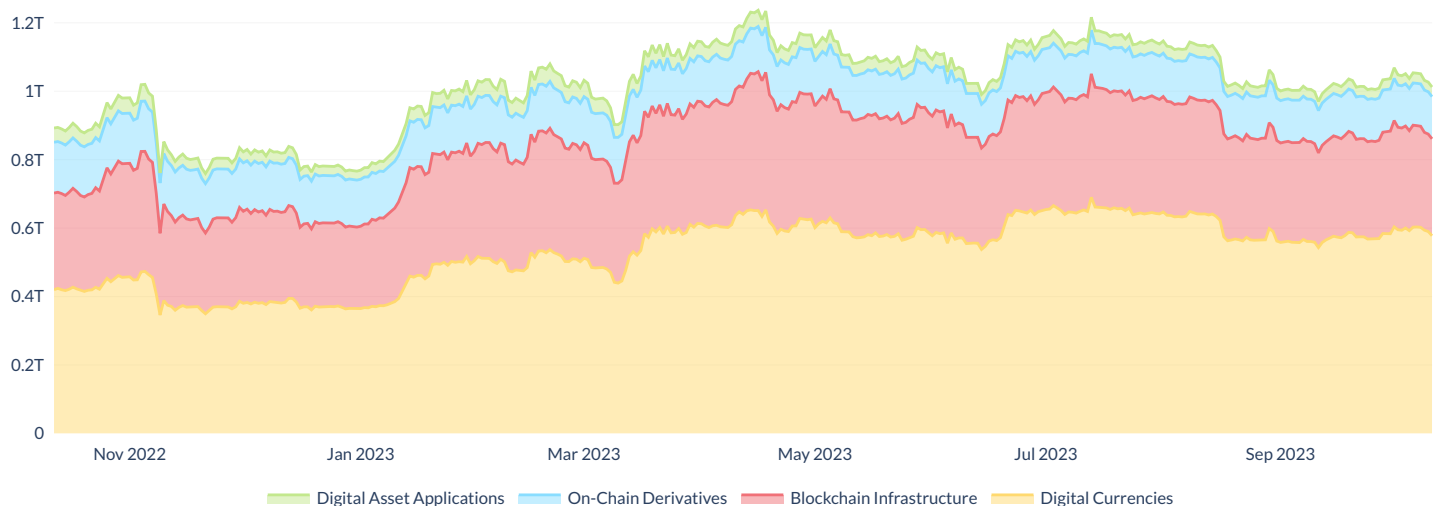
TRENDING SECTOR INDEXES, 7 DAY TREND

COINMETRICS



CRYPTO MARKET CAPITALIZATION (USD)
BY DATONOMY CLASS

COINMETRICS

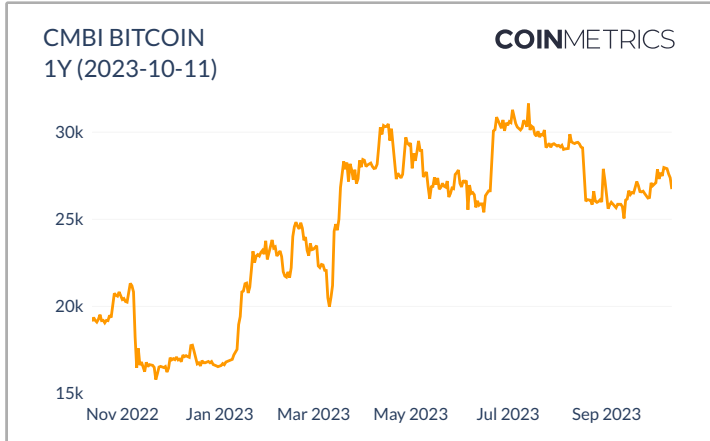


INDEX ROUNDUP

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	\$26,735.08	-2.74%	\$27,973.49	\$26,735.08	+38.06%	\$31,644.02	\$15,799.60
CMBIBTCT	\$28,723.86	-2.74%	\$30,054.39	\$28,723.86	+38.06%	\$33,997.97	\$16,974.91
CMBIETH	\$1,561.61	-3.40%	\$1,649.08	\$1,561.61	+21.35%	\$2,129.88	\$1,103.83
CMBIETHHT	\$1,695.27	-3.40%	\$1,790.23	\$1,695.27	+21.35%	\$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	\$2,712.72	-3.05%	\$2,848.18	\$2,712.72	+22.37%	\$3,398.54	\$1,838.40
CMBI10E	\$3,857.45	-4.45%	\$4,105.93	\$3,857.45	-19.73%	\$6,420.90	\$3,409.70
CMBI10EX	\$5,576.43	-3.53%	\$5,886.15	\$5,576.43	+3.43%	\$7,991.44	\$4,562.49
CMBI10M	\$9,849.08	-1.50%	\$10,090.97	\$9,849.08	-19.63%	\$13,044.36	\$9,310.27
CMBIBE	\$13,330.66	-2.97%	\$13,992.39	\$13,330.66	+31.89%	\$16,210.93	\$8,387.96

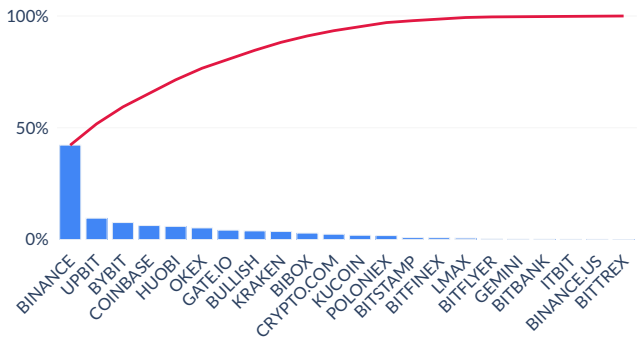


MARKET MOVEMENT

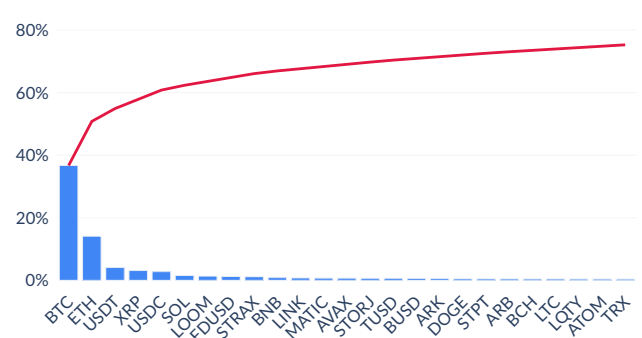
TRADING DIARY, 7 DAY

ADVANCING VOLUME	\$10,842,282,229
DECLINING VOLUME	\$79,150,490,047
ADVANCES	135
DECLINES	587

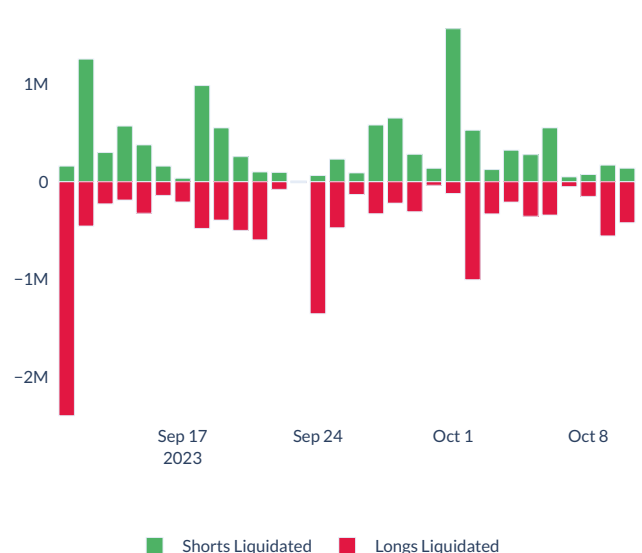
EXCHANGE SPOT SHARE, 7 DAY MEAN



BASE ASSET SPOT SHARE, 7 DAY MEAN

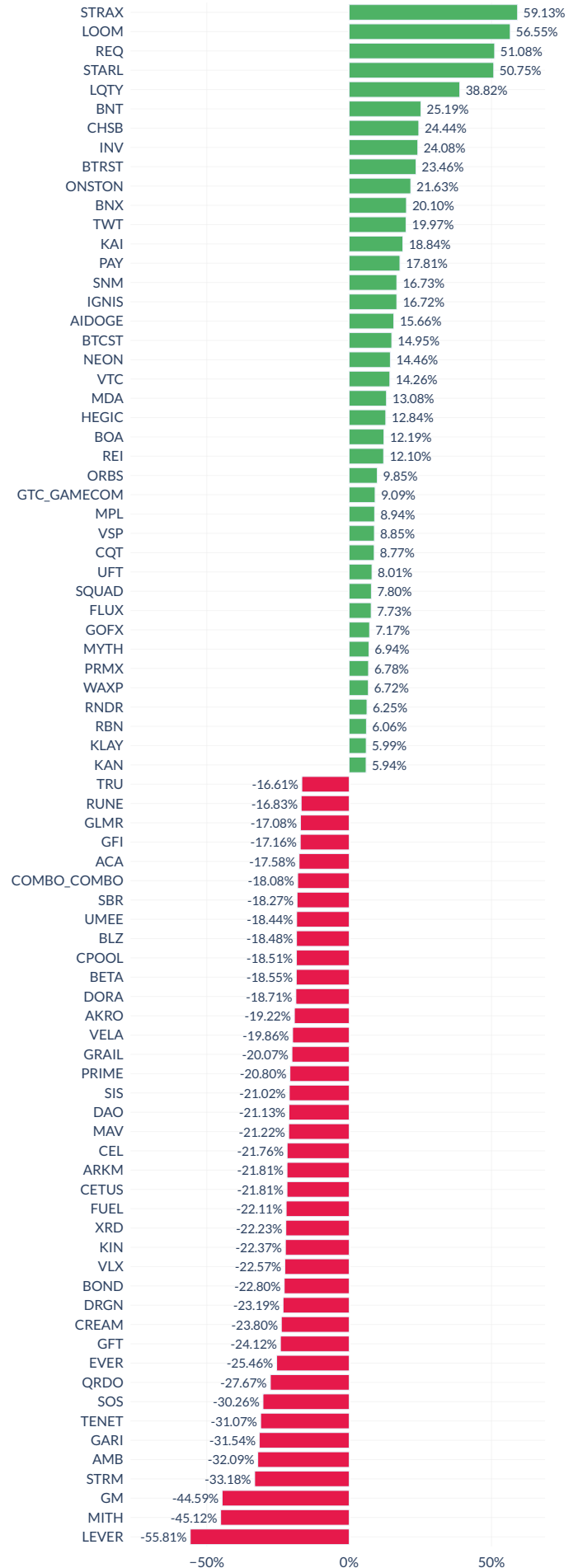


BTC PERPETUALS, TOTAL LIQUIDATIONS

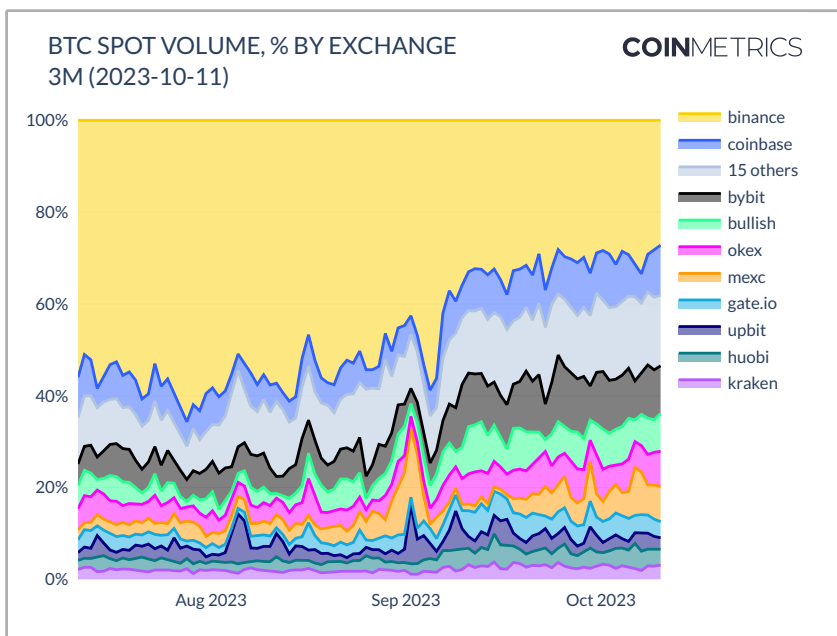
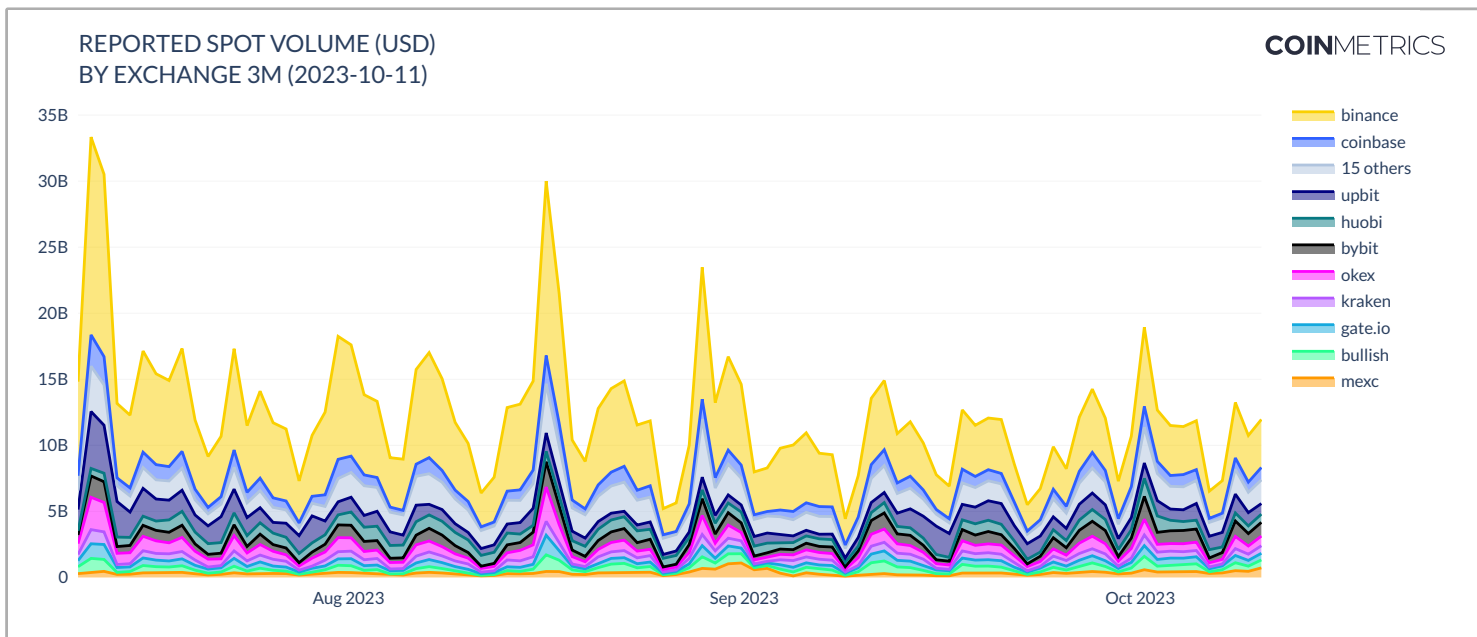


PRICE CHANGE, 7 DAY

COINMETRICS



AGGREGATE VOLUME



BTC SPOT VOLUME LEADERS

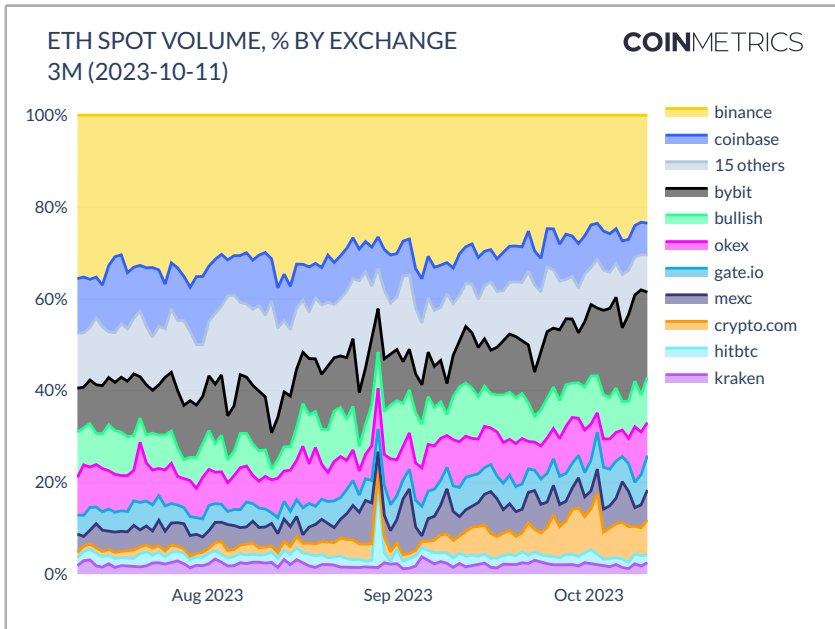
Top 10 exchanges by Bitcoin (BTC) spot volume reported over past 3 months.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BINANCE	+9.61%	985,173,772	1,321,787,079	506,601,636
COINBASE	+14.29%	317,521,367	499,535,726	114,727,109
BYBIT	+6.52%	360,168,051	492,324,005	137,494,223
BULLISH	+16.43%	263,764,819	402,670,557	76,178,559
OKEX	+41.20%	228,951,060	353,286,567	90,577,692
MEXC	+72.76%	237,586,714	352,173,387	169,176,337
GATE.IO	-18.07%	142,378,990	226,097,441	61,038,167
UPBIT	+40.88%	88,692,615	135,576,685	37,417,272
HUOBI	+2.52%	129,095,953	164,868,495	88,559,692
KRAKEN	+20.92%	94,663,959	143,414,988	37,959,260

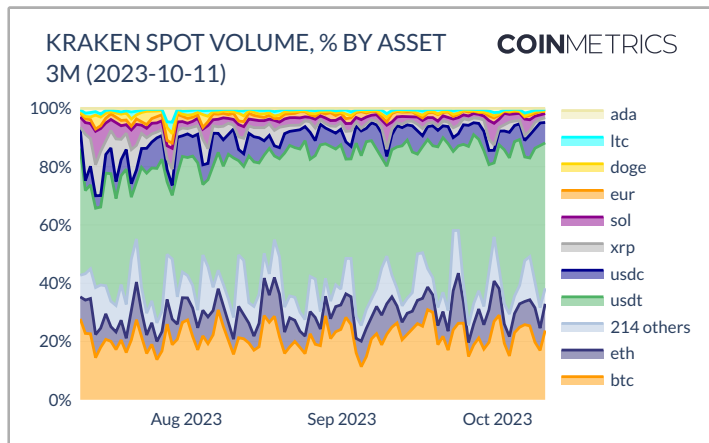
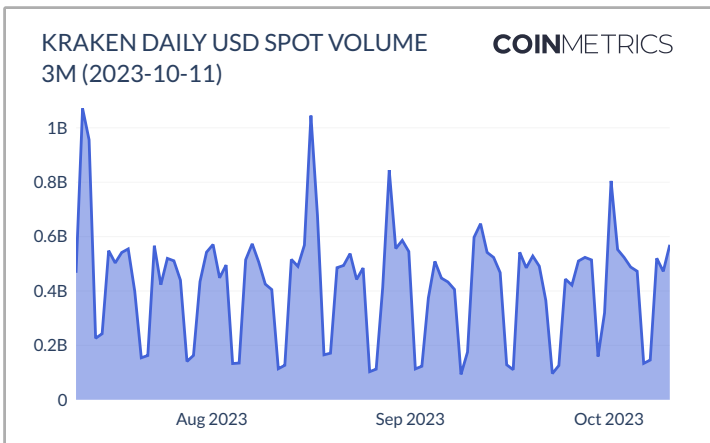
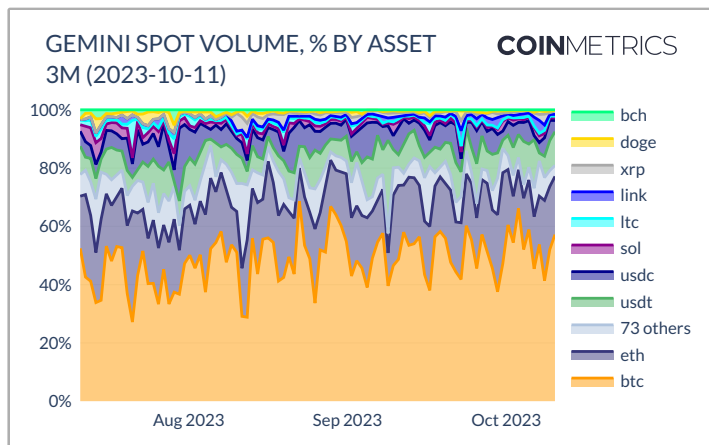
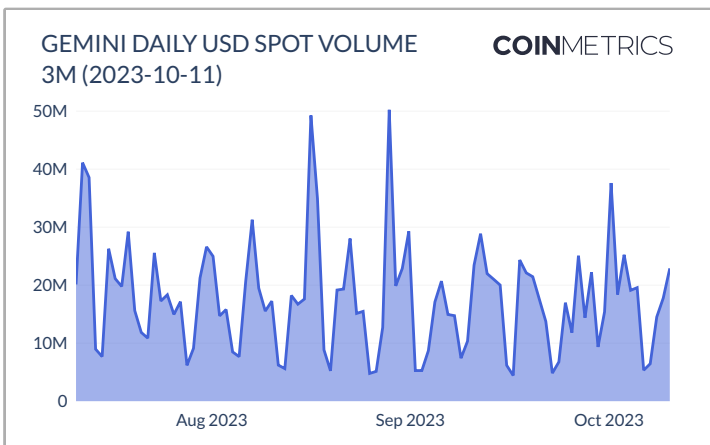
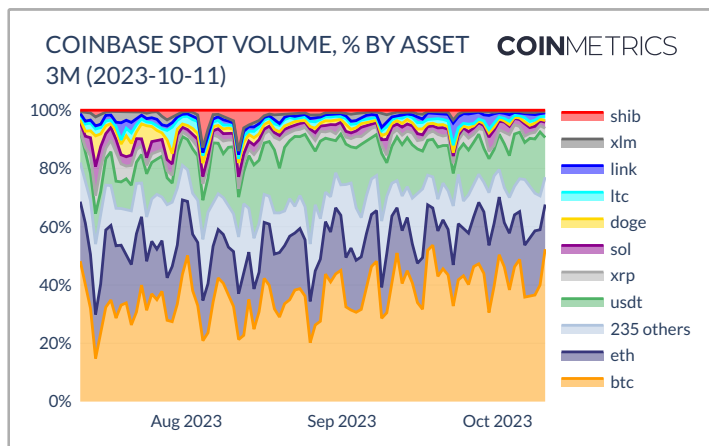
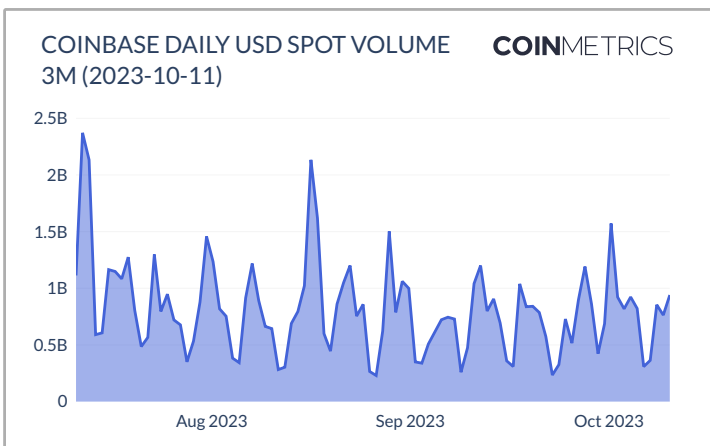
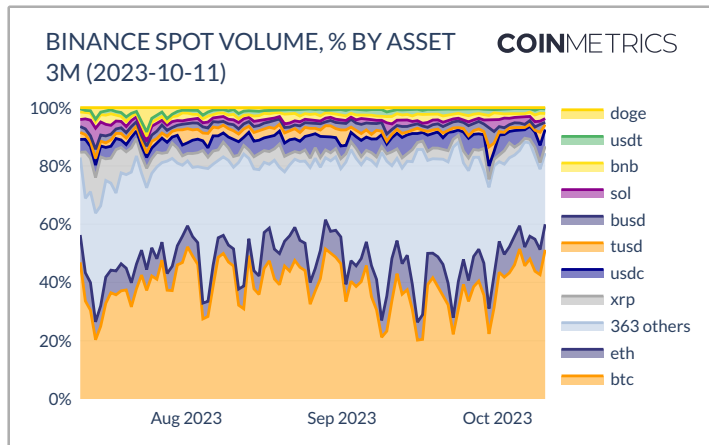
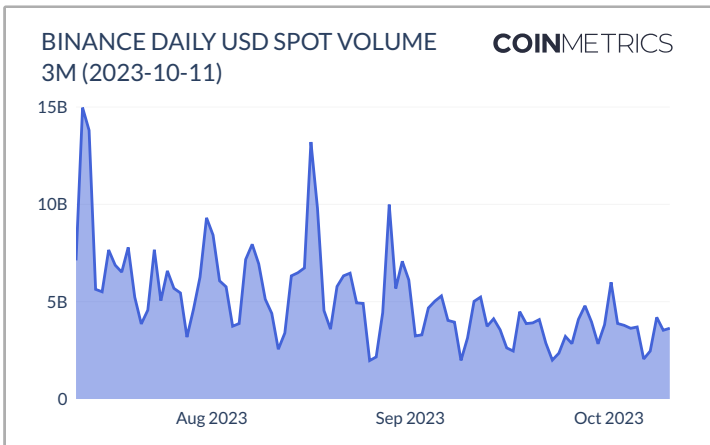
ETH SPOT VOLUME LEADERS

Top 10 exchanges by Ethereum (ETH) spot volume reported over past 3 months.

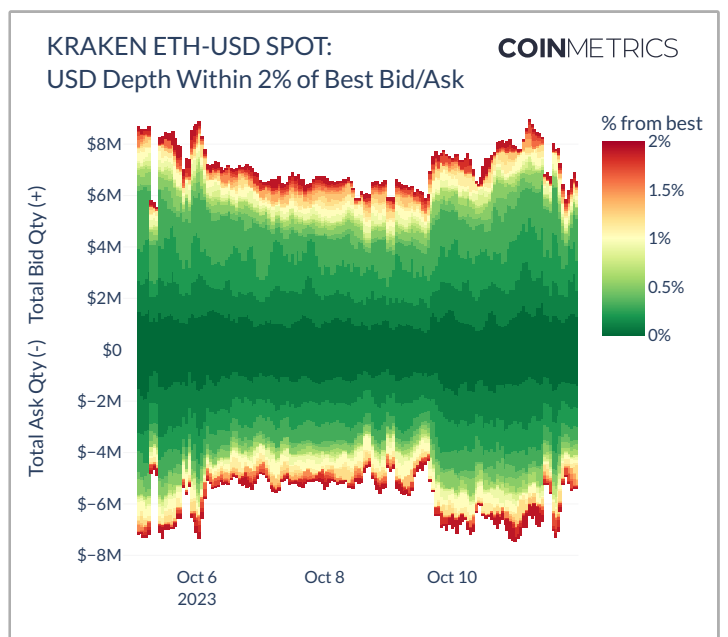
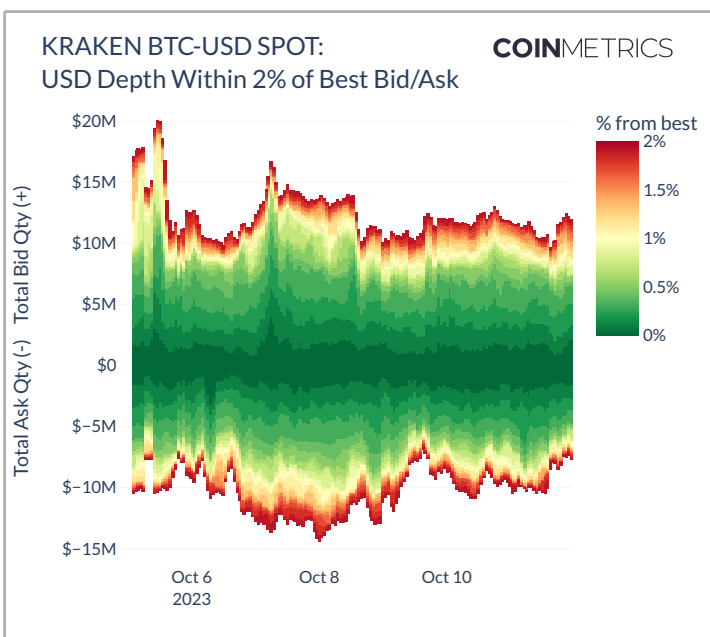
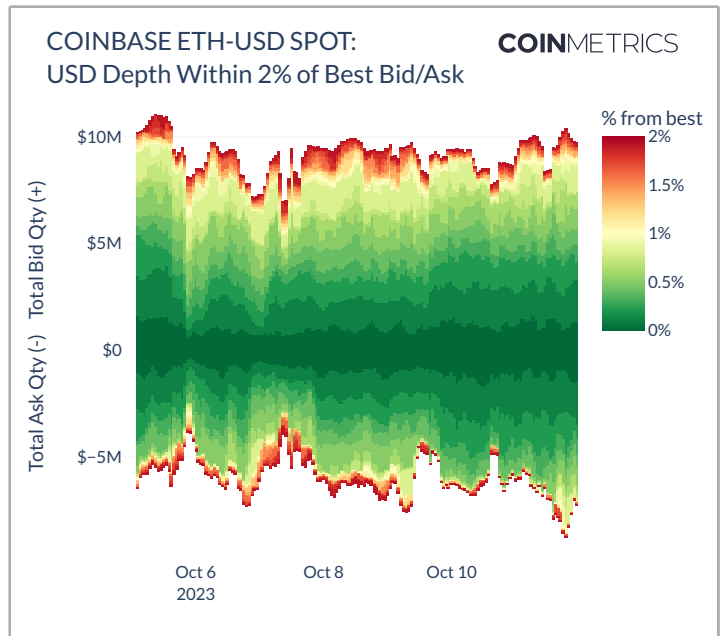
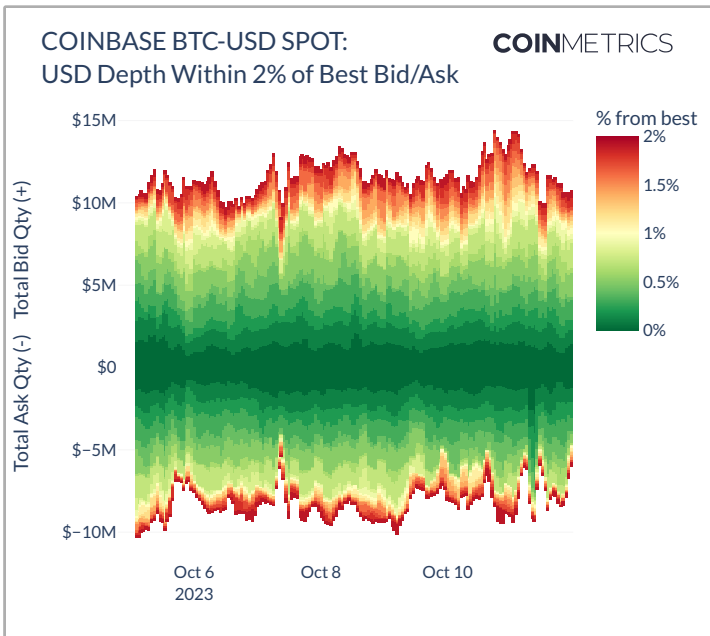
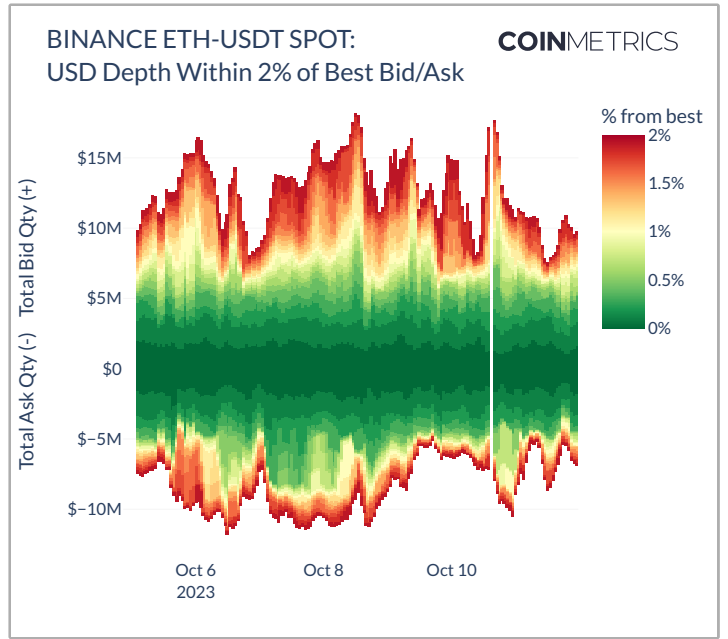
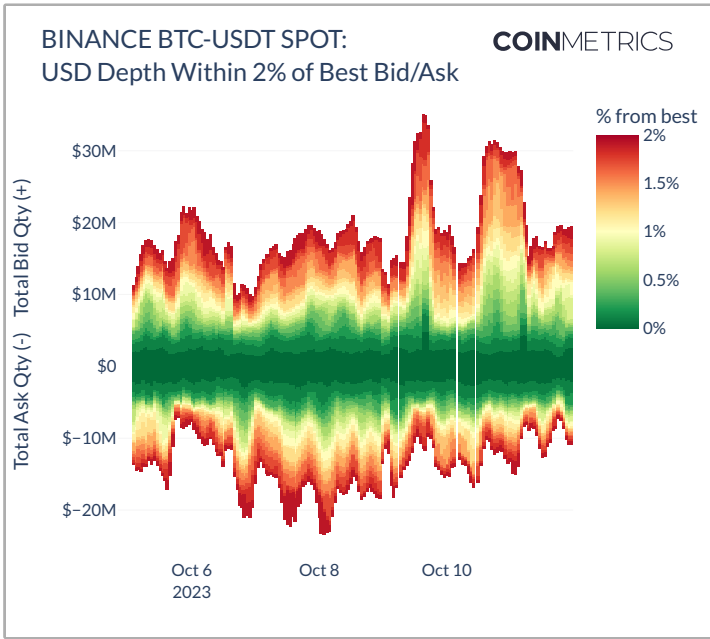
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BINANCE	-3.82%	442,008,961	660,448,889	206,729,612
COINBASE	-13.02%	130,034,680	188,888,004	55,399,131
BYBIT	+1.50%	349,340,263	516,293,286	121,309,405
BULLISH	+14.67%	161,812,821	272,013,660	46,931,409
OKEX	+14.89%	145,859,277	332,550,356	43,363,947
GATE.IO	+0.13%	122,337,777	157,834,878	41,332,233
MEXC	+38.67%	100,059,168	135,787,638	66,996,585
CRYPTO.COM	+24.09%	122,565,286	165,682,944	60,055,362
HITBTC	-2.52%	33,197,614	59,033,219	14,262,654
KRAKEN	+62.11%	35,118,501	62,051,690	10,938,669



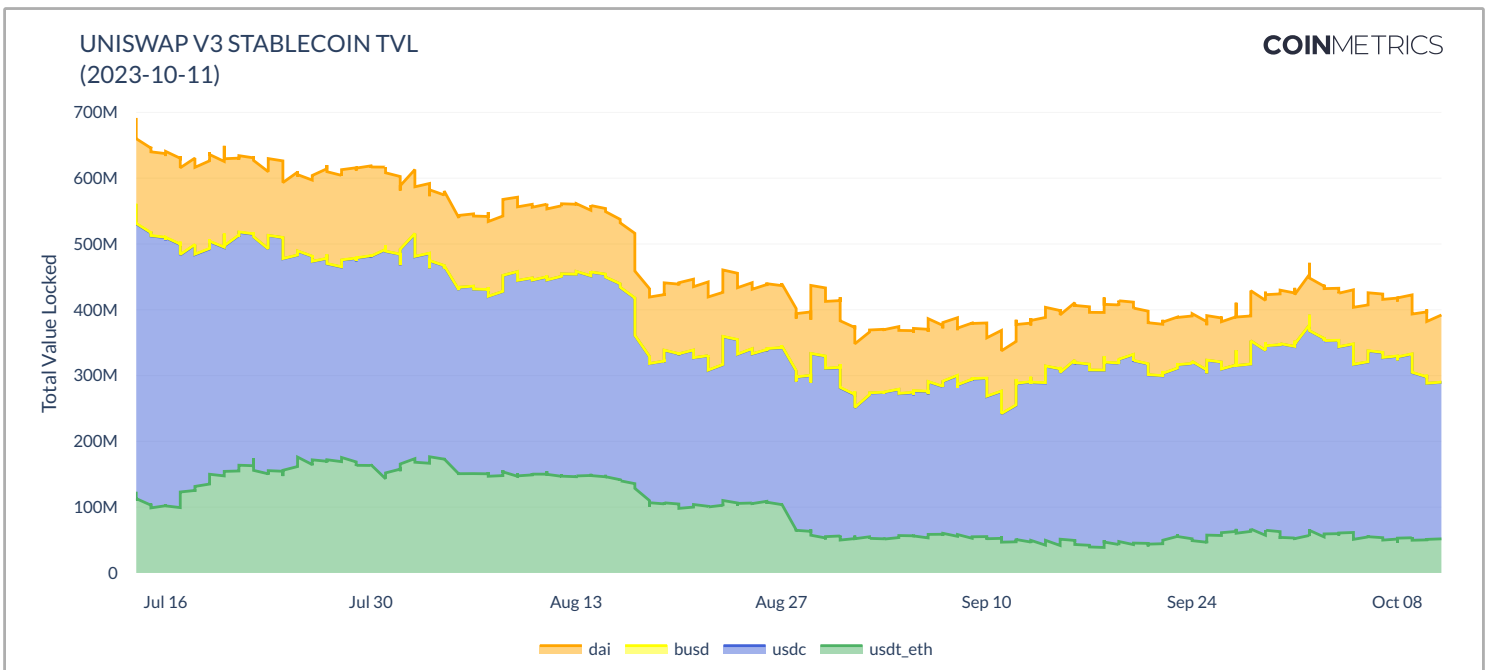
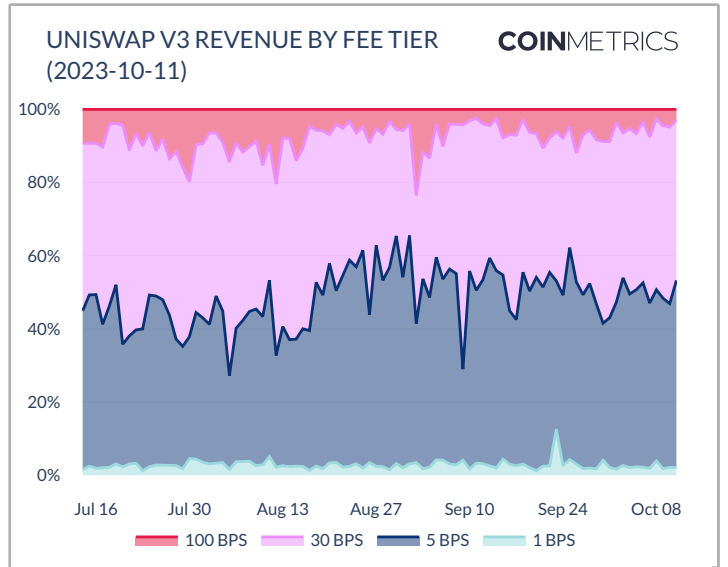
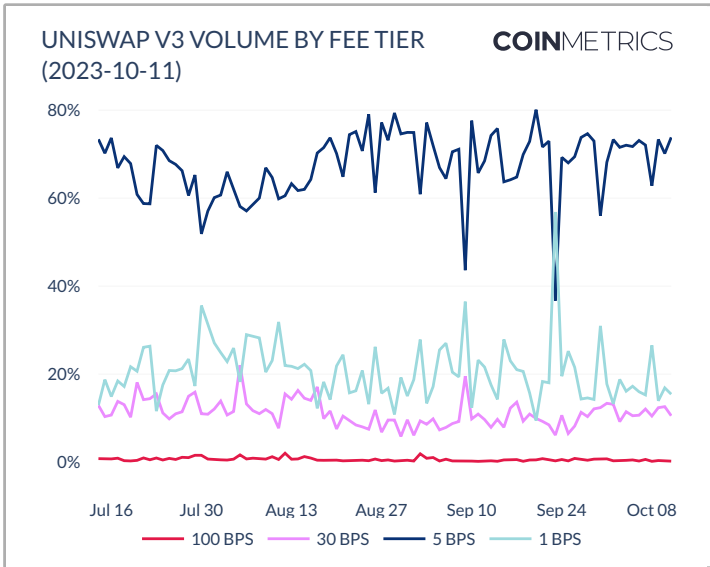
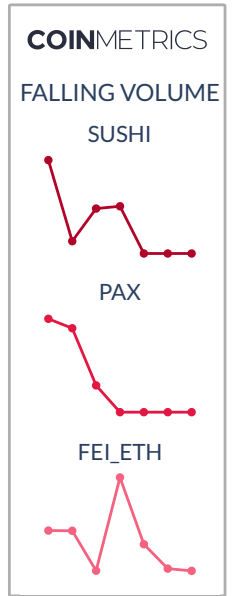
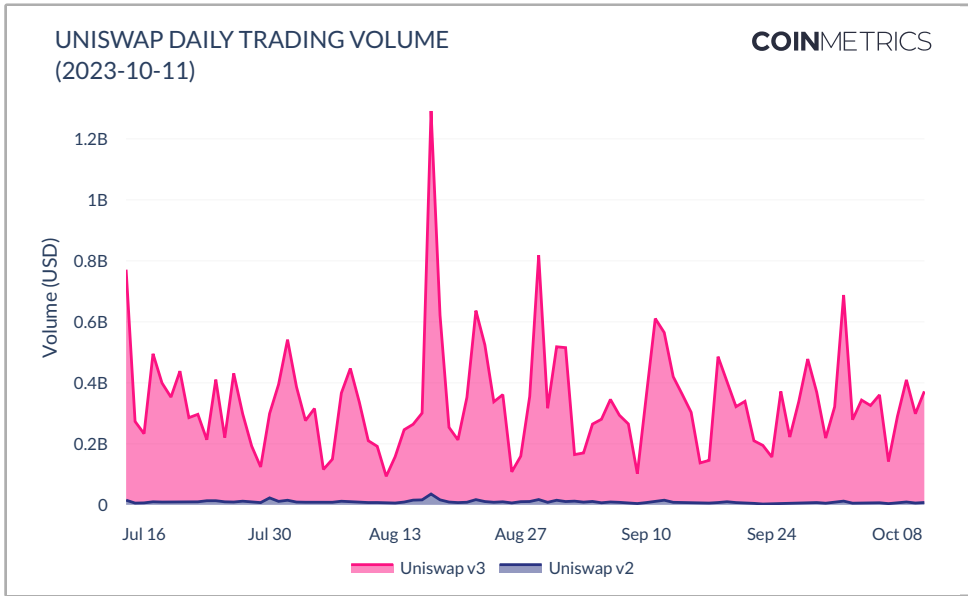
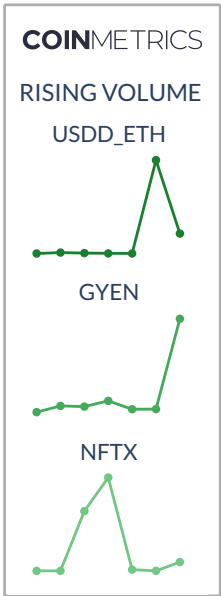
EXCHANGE SPOT VOLUME



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.

DEFI BALANCE SHEETS

LENDING PROTOCOL TVL (USD)
1Y (2023-10-11)

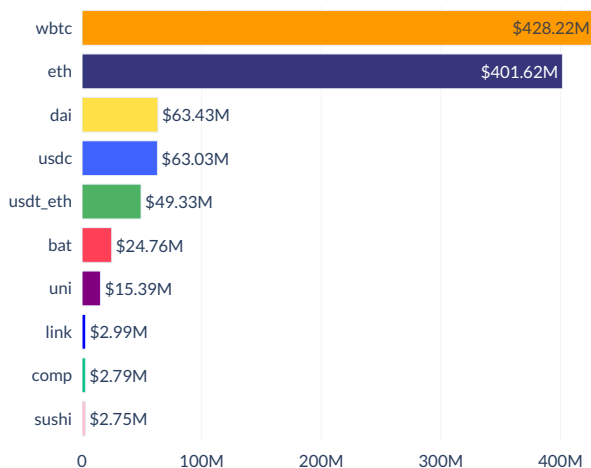
COINMETRICS



COMPOUND V2 BALANCE SHEET

PROTOCOL HEALTH RATIOS	VALUE	7D CHANGE
CURRENT RATIO	0.70681	-0.98%
DEBT TO ASSETS RATIO	0.970028	-0.14%
PROTOCOL UTILIZATION RATIO	0.324089	2.68%
LIQUID SUPPLY RATIO	0.70681	-0.98%
ASSETS AND LIABILITIES	VALUE	7D CHANGE
ASSETS TOTAL USD	\$1,557M	-4.73%
ASSETS TOTAL COUNT	19	0.0%
LIABILITIES TOTAL USD	\$1,510M	-4.86%
LIABILITIES TOTAL COUNT	19	0.0%
LOANS LENT TOTAL USD	\$490M	-2.31%
TVL TOTAL USD	\$1,068M	-5.79%
NET WORKING CAPITAL USD	-\$443M	-2.53%

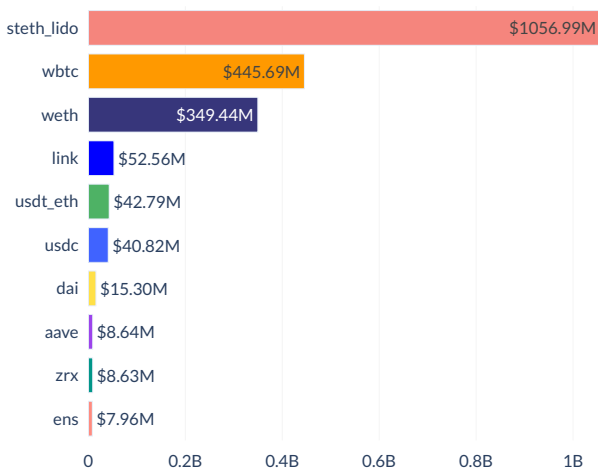
TOP 10 ASSETS BY TOTAL VALUE LOCKED (USD)



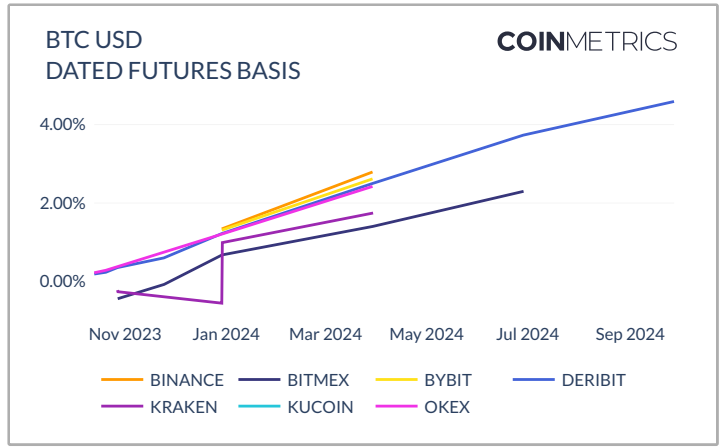
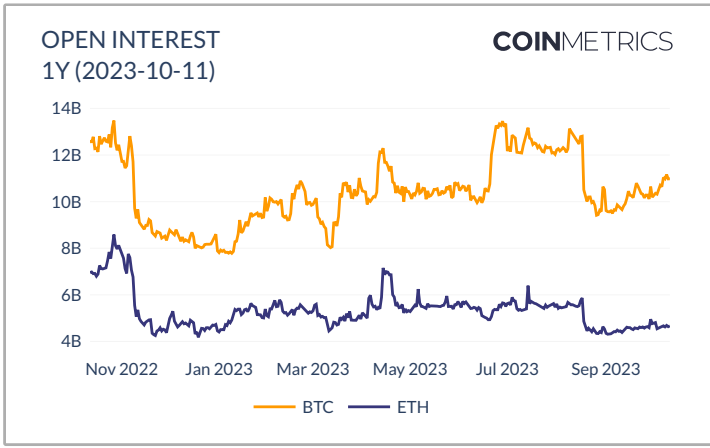
AAVE V2 BALANCE SHEET

PROTOCOL HEALTH RATIOS	VALUE	7D CHANGE
CURRENT RATIO	0.663001	-0.25%
DEBT TO ASSETS RATIO	1.000145	0.0%
PROTOCOL UTILIZATION RATIO	0.336855	0.5%
LIQUID SUPPLY RATIO	0.663001	-0.25%
ASSETS AND LIABILITIES	VALUE	7D CHANGE
ASSETS TOTAL USD	\$3,126M	-4.02%
ASSETS TOTAL COUNT	52	0.0%
LIABILITIES TOTAL USD	\$3,127M	-4.02%
LIABILITIES TOTAL COUNT	52	0.0%
LOANS LENT TOTAL USD	\$1,053M	-3.55%
TVL TOTAL USD	\$2,073M	-4.26%
NET WORKING CAPITAL USD	-\$1,054M	-3.55%

TOP 10 ASSETS BY TOTAL VALUE LOCKED (USD)



FUTURES FEED



OPEN INTEREST

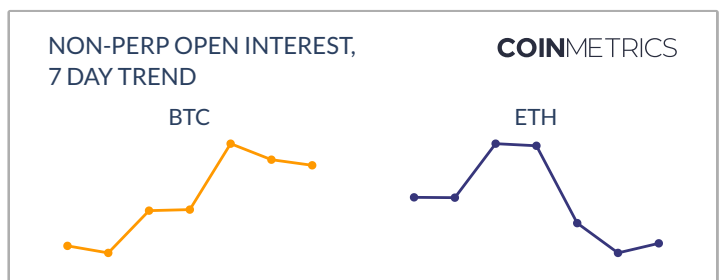
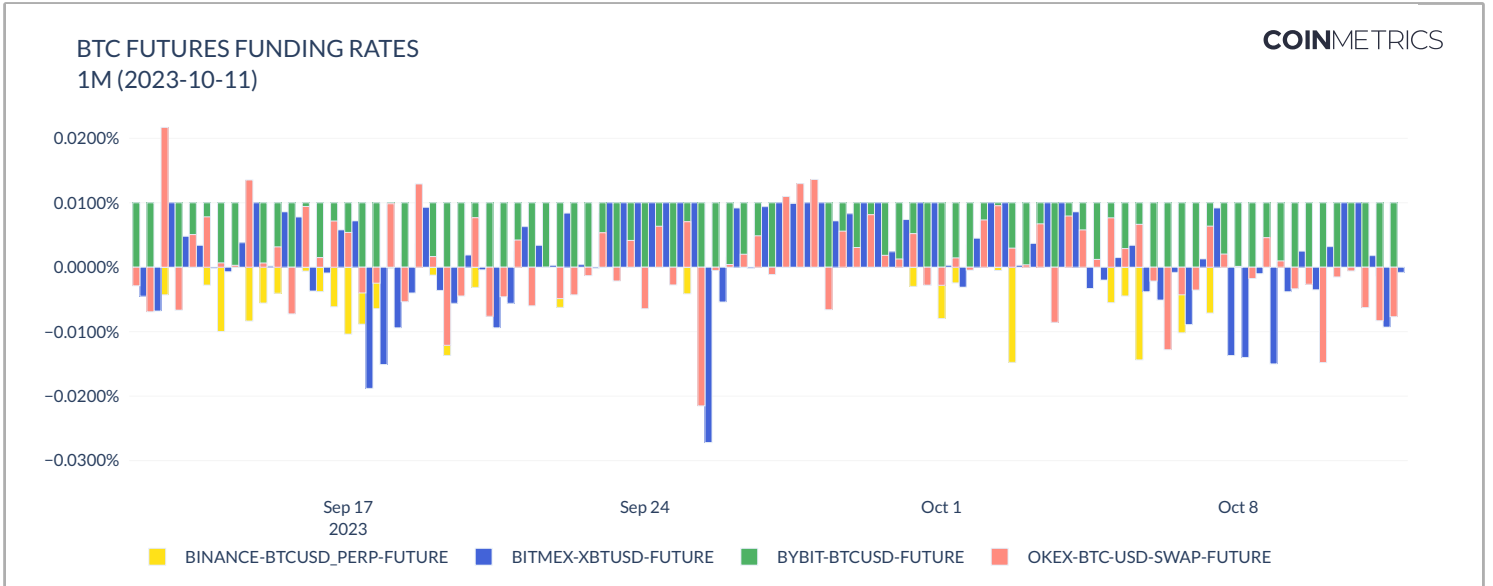
Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+2.56%	10,926,267,112	11,164,904,819	10,642,714,623
ETH	+1.18%	4,651,485,891	4,689,547,349	4,612,924,303
XRP	-11.43%	395,179,398	415,909,009	366,578,497
ADA	+4.76%	99,256,667	102,839,404	93,079,831
LINK	-19.79%	155,187,153	174,358,412	135,231,753
CRO	-6.38%	4,416,923	4,566,969	4,275,469
LTC	-0.51%	207,717,420	209,875,109	203,954,628
BCH	-13.78%	231,883,890	246,509,841	212,541,682
UNI	-2.98%	36,883,749	37,977,789	35,348,059

FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+8.76%	24,421,951,506	35,971,364,587	9,258,131,428
ETH	+9.49%	8,952,591,490	14,253,879,874	3,125,830,275
XRP	-15.21%	862,079,969	1,345,851,986	356,138,269
ADA	-21.60%	204,118,457	262,285,158	129,616,448
LINK	-18.94%	525,070,387	696,824,578	300,822,746
CRO	-25.78%	1,938,637	4,892,578	646,008
LTC	+6.99%	285,594,064	448,919,567	179,158,210
BCH	-16.81%	605,656,672	808,647,839	410,081,907
UNI	-5.57%	53,231,002	83,574,485	32,244,110



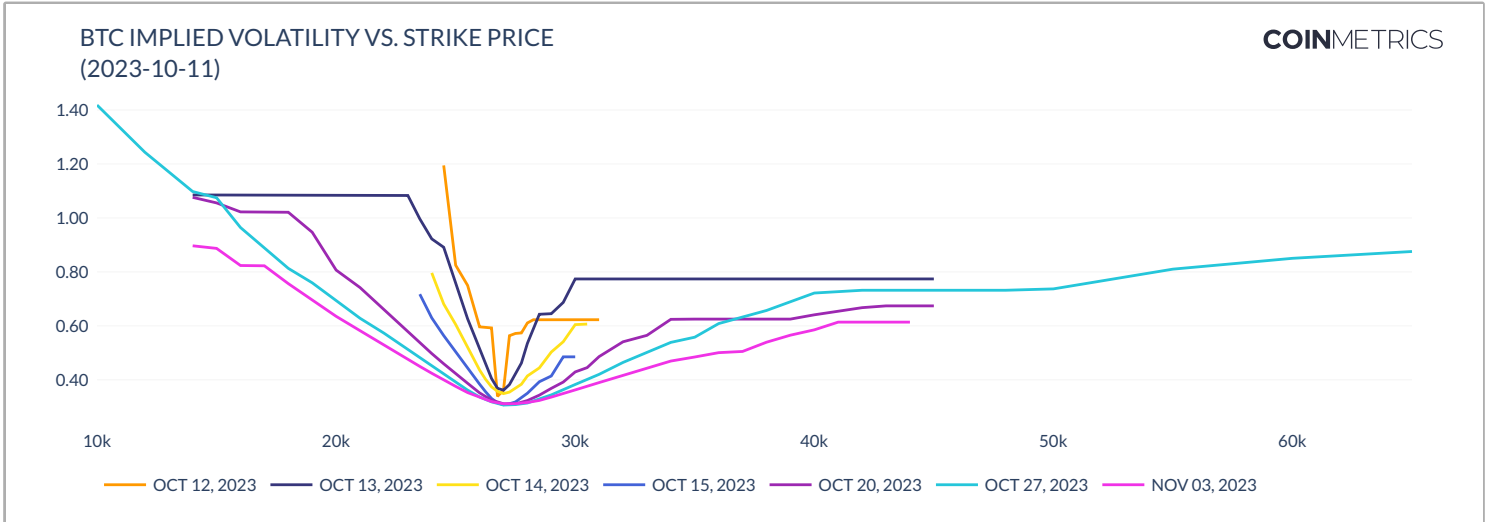
OPTIONS SNAPSHOT

BTC OPEN INTEREST

TOTAL	\$7,871,703,885
CALLS	\$5,363,732,698
PUTS	\$2,507,971,186

ETH OPEN INTEREST

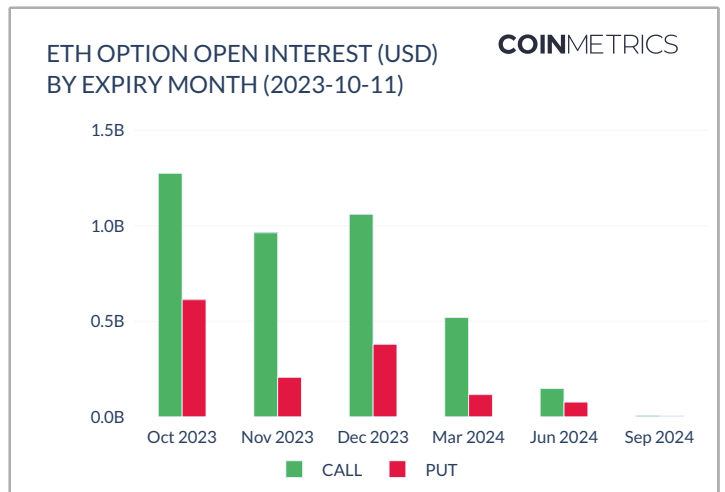
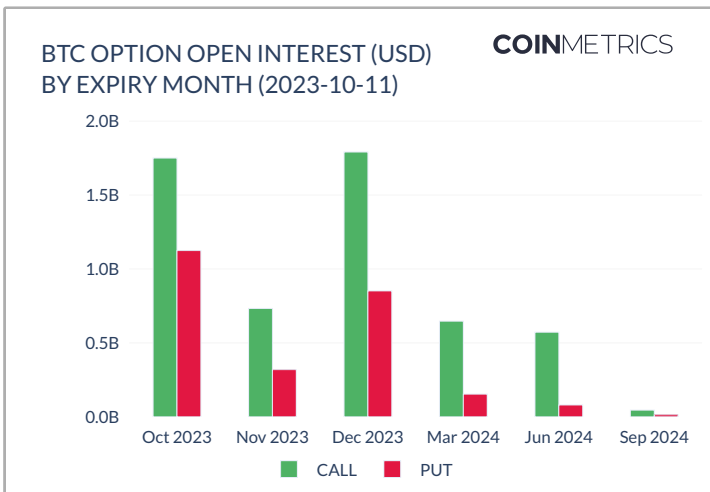
TOTAL	\$5,150,549,438
CALLS	\$3,817,610,793
PUTS	\$1,332,938,644



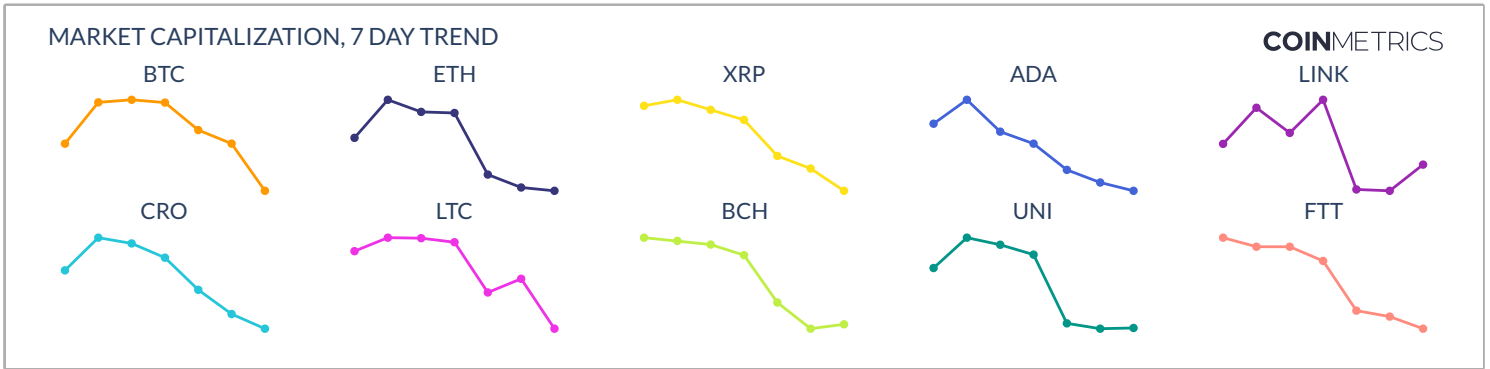
AT THE MONEY OPTIONS

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
3.92038	-26.14194	1.98028	0.91517	0.00015	0.3568	0.0143	BTC-12OCT23-26500	0.0005	0.3566	0.00015	-0.08483	-0.1973	-26.14194	3.92038
6.73056	-47.41679	1.59488	0.79821	0.0003	0.2804	0.0062	BTC-12OCT23-26750	0.0016	0.2802	0.0003	-0.20179	-0.42765	-47.41679	6.73056
6.96755	-46.4611	1.76235	0.8045	0.00027	0.2435	0.0012	BTC-12OCT23-27000	0.0059	0.2435	0.00027	-0.1955	-0.45631	-46.4611	6.96755
8.38964	-55.94389	1.6005	0.72695	0.00033	0.3321	0.0004	BTC-12OCT23-27250	0.0144	0.3321	0.00033	-0.27305	-0.63871	-55.94389	8.38964
25.62315	-23.29451	9.00326	0.602	0.00015	0.3877	0.0178	BTC-13OCT23-26500	0.004	0.3877	0.00015	-0.39802	-6.96917	-23.29471	25.62337
6.1946	-62.22734	0.98874	0.74462	0.00045	0.3527	0.011	BTC-13OCT23-26750	0.0064	0.3527	0.00045	-0.2554	-0.35439	-62.23011	6.19488
26.43233	-24.03015	7.94151	0.52716	0.00015	0.3207	0.0056	BTC-13OCT23-27000	0.0103	0.3207	0.00015	-0.47287	-8.33245	-24.0301	26.43227
7.67369	-65.88103	0.63638	0.47399	0.00066	0.3201	0.0027	BTC-13OCT23-27250	0.0167	0.3201	0.00066	-0.52601	-0.73183	-65.88103	7.67369
8.31085	-54.21164	1.53089	0.71534	0.00035	0.3491	0.0194	BTC-14OCT23-26500	0.0055	0.349	0.00035	-0.28456	-0.64593	-54.12739	8.3093
9.32928	-60.7454	1.33173	0.61954	0.0004	0.3254	0.0128	BTC-14OCT23-26750	0.0082	0.3254	0.0004	-0.38045	-0.86591	-60.83832	9.32936



MARKET CAPITALIZATION



MARKET CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-2.15%	538,185,060,096	545,663,221,046	523,440,934,621
ETH	-2.83%	198,412,007,680	203,224,053,714	193,547,961,243
XRP	-6.72%	51,108,890,336	52,598,412,709	48,833,101,093
ADA	-4.79%	8,809,382,982	9,124,019,040	8,540,459,976
LINK	-1.26%	7,471,673,469	7,685,536,865	7,273,444,074
CRO	-2.25%	4,998,097,284	5,075,032,192	4,898,697,746
LTC	-5.31%	4,735,121,578	4,831,414,793	4,532,881,059
BCH	-7.68%	4,367,886,672	4,522,593,138	4,157,650,935
UNI	-4.16%	4,255,600,951	4,392,525,764	4,121,088,318
FTT	-16.38%	371,790,247	401,113,014	335,403,122

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-2.16%	378,482,518,549	383,781,670,261	368,070,031,005
ETH	-2.96%	175,939,201,563	180,310,038,688	171,533,949,098
XRP	-6.61%	24,088,549,229	24,778,099,674	23,032,012,581
ADA	-4.74%	7,844,602,009	8,121,516,506	7,606,621,087
LINK	-1.27%	4,074,010,752	4,190,644,687	3,965,688,358
CRO	-2.26%	474,352,950	481,657,524	464,915,502
LTC	-5.31%	4,005,612,475	4,087,427,378	3,834,304,974
BCH	-7.68%	2,947,645,354	3,052,034,167	2,805,782,920
UNI	-4.18%	1,056,645,180	1,090,879,368	1,023,157,008
FTT	-16.38%	371,790,247	401,113,014	335,403,122

REALIZED CAP

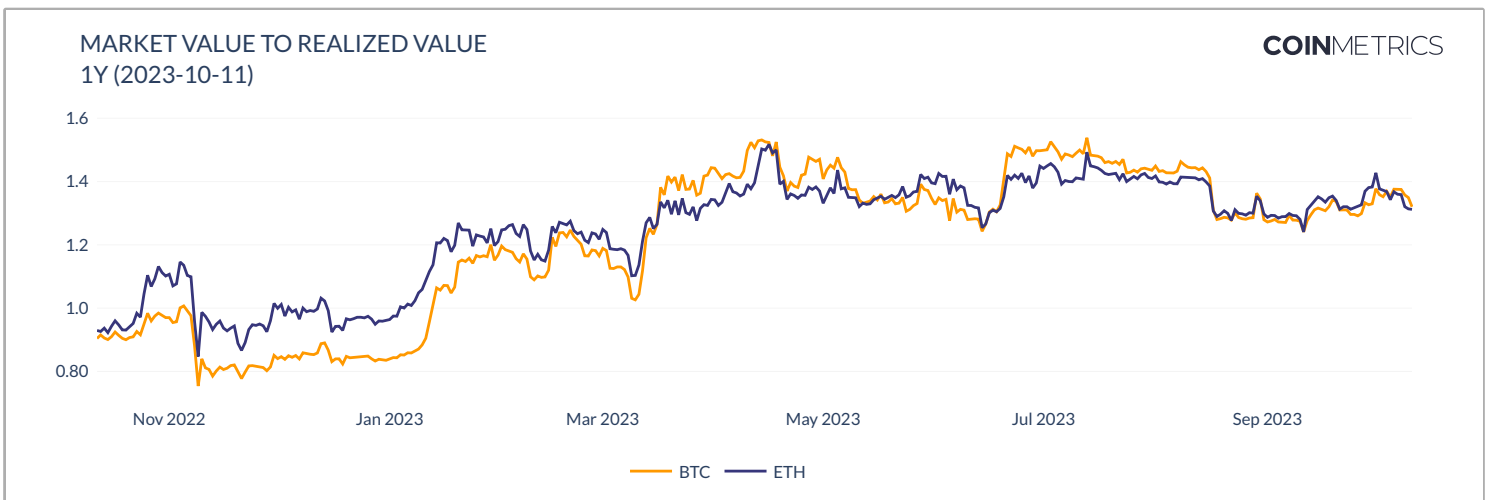
USD value for all native units based on the USD closing price on the day that a unit last moved.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.13%	396,312,723,974	396,491,809,707	395,969,574,928
ETH	-0.57%	148,141,439,149	148,617,004,384	147,509,113,051
XRP	-0.35%	51,840,807,251	51,904,905,032	51,721,655,524
ADA	-0.48%	15,437,659,011	15,461,686,550	15,387,682,310
LINK	-0.04%	8,422,809,631	8,430,217,434	8,415,630,267
CRO	+0.03%	20,500,681,870	20,503,731,299	20,493,917,694
LTC	-0.18%	6,760,350,300	6,765,935,121	6,753,954,154
BCH	+0.22%	4,699,889,907	4,706,168,599	4,686,158,776
UNI	-0.18%	8,302,189,738	8,310,433,762	8,292,118,188
FTT	-23.83%	699,049,396	841,931,805	641,306,696

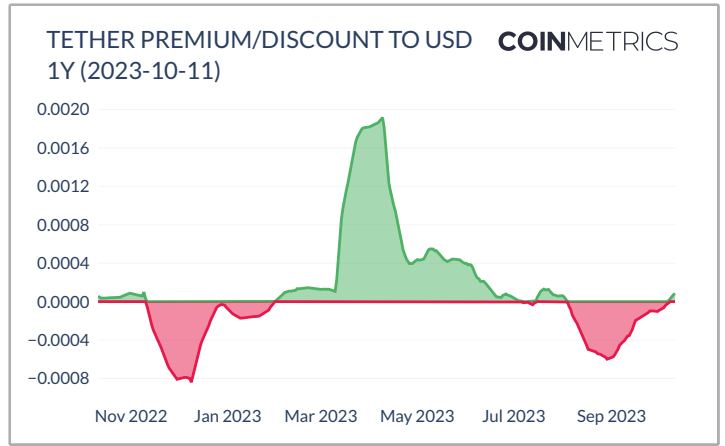
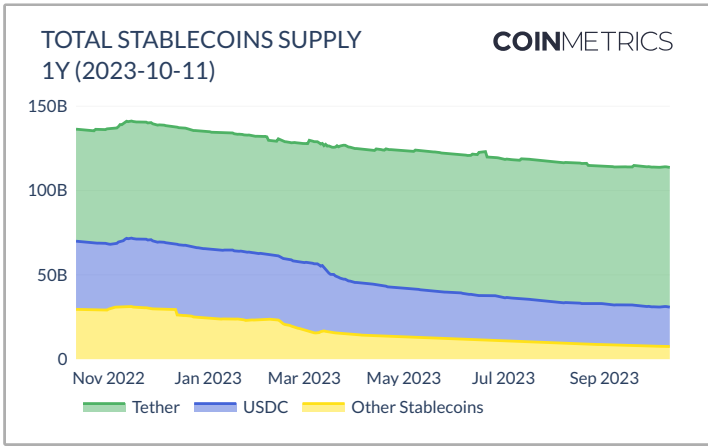
MARKET VALUE TO REALIZED VALUE

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	-2.27%	1.36	1.38	1.32
ETH	-2.27%	1.34	1.37	1.31
XRP	-6.39%	0.99	1.01	0.94
ADA	-4.34%	0.57	0.59	0.56
LINK	-1.22%	0.89	0.91	0.86
CRO	-2.28%	0.24	0.25	0.24
LTC	-5.14%	0.70	0.71	0.67
BCH	-7.89%	0.93	0.97	0.89
UNI	-3.99%	0.51	0.53	0.50
FTT	+9.78%	0.54	0.61	0.47



STABLECOINS REPORT



MARKET CAPITALIZATION

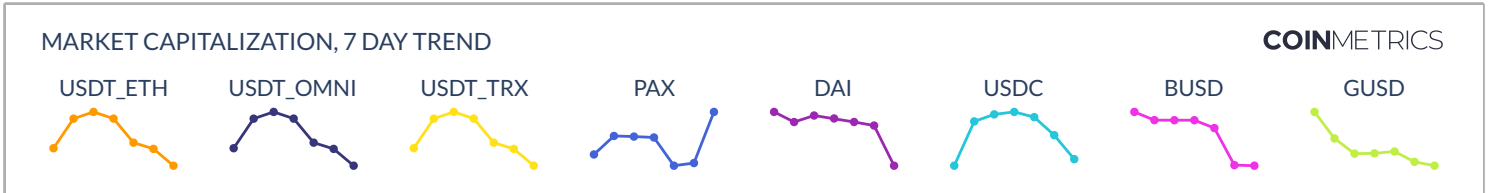
USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.03%	39,034,040,058	39,050,241,569	39,014,621,690
USDT_OMNI	-0.03%	888,212,520	888,581,183	887,770,659
USDT_TRX	-0.03%	43,840,681,778	43,858,897,357	43,818,846,892
PAX	+0.47%	484,279,465	485,965,736	483,102,771
DAI	-0.95%	3,821,443,555	3,830,868,684	3,794,563,913
USDC	+0.17%	23,489,812,817	23,609,743,535	23,290,546,555
BUSD	-3.72%	2,194,786,359	2,227,336,146	2,144,492,461
GUSD	-2.61%	218,083,653	221,981,018	216,180,985

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+12.31%	2,837,636,243	3,566,491,669	1,414,159,299
USDT_OMNI	+1,559.65%	99,878	339,795	2,885
USDT_TRX	+11.36%	8,682,459,406	10,564,606,145	4,900,927,037
PAX	-69.67%	4,136,956	12,239,137	1,582,765
DAI	-78.87%	912,832,944	1,845,198,430	303,196,673
USDC	+6.65%	3,729,827,462	4,946,667,636	1,963,283,499
BUSD	+262.56%	78,028,433	342,361,641	986,360
GUSD	-78.00%	4,229,309	19,080,170	98,925



TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+2.43%	113,259	125,054	95,912
USDT_OMNI	-94.51%	107	492	5
USDT_TRX	+2.42%	1,931,199	2,040,432	1,706,840
PAX	+3.66%	92	128	52
DAI	+14.26%	4,124	4,857	3,164
USDC	-0.52%	36,235	41,076	27,204
BUSD	-16.60%	497	598	435
GUSD	-89.72%	400	895	42

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

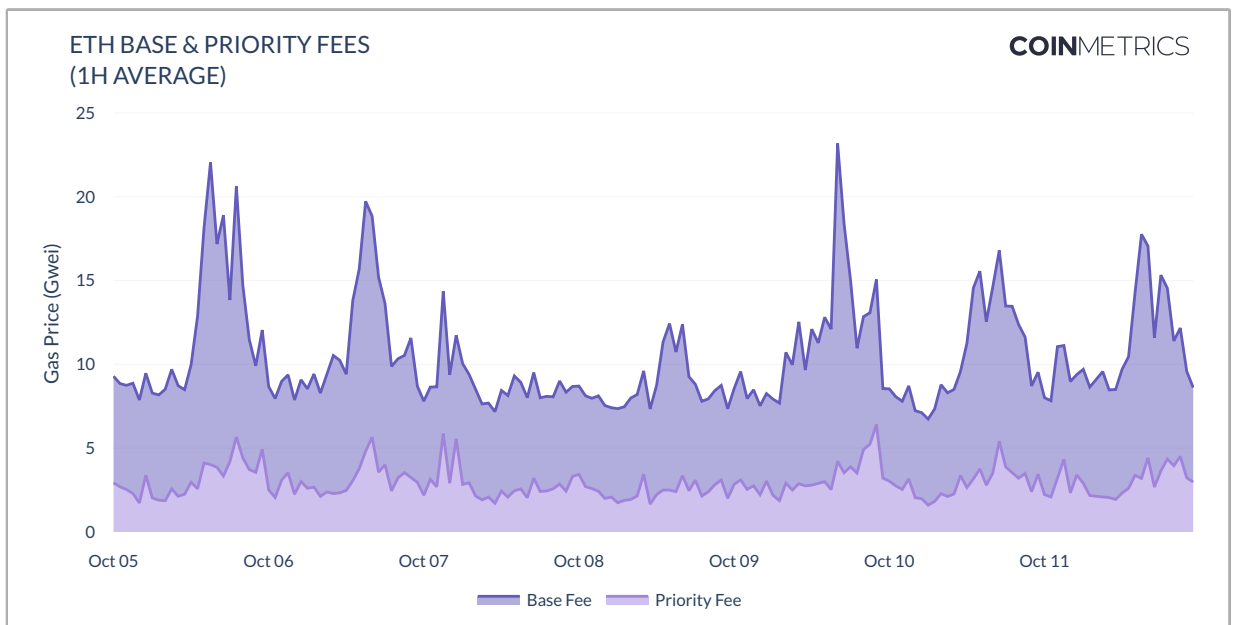
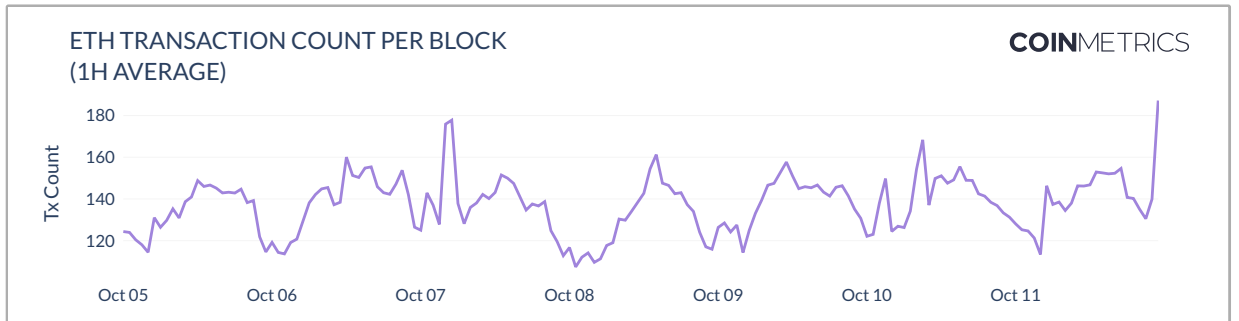
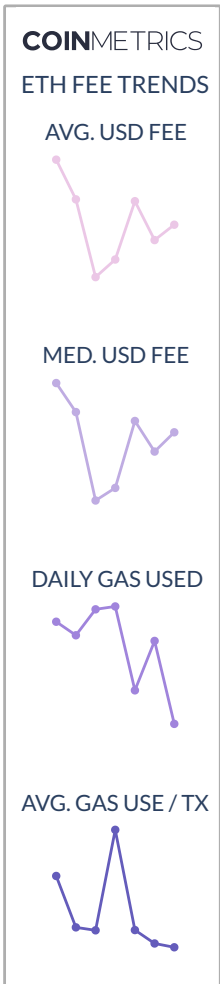
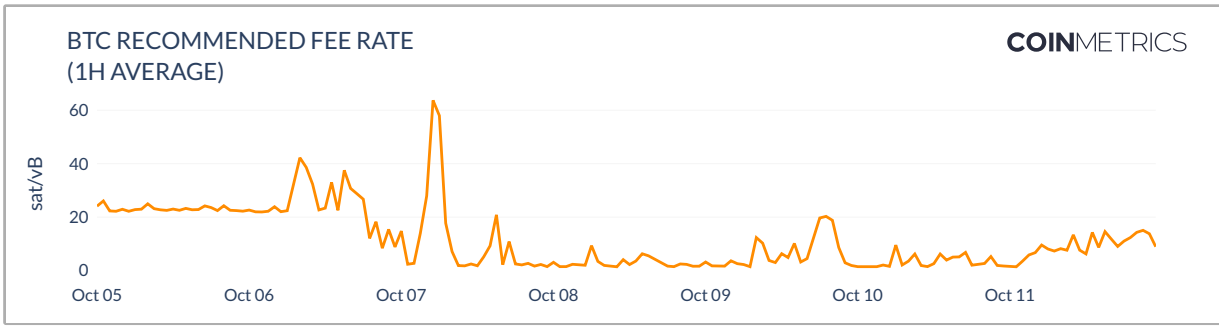
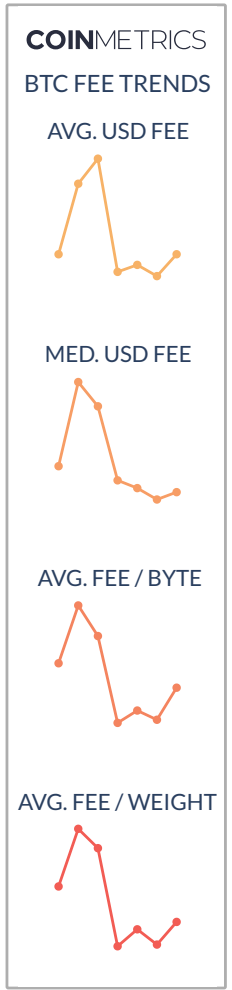
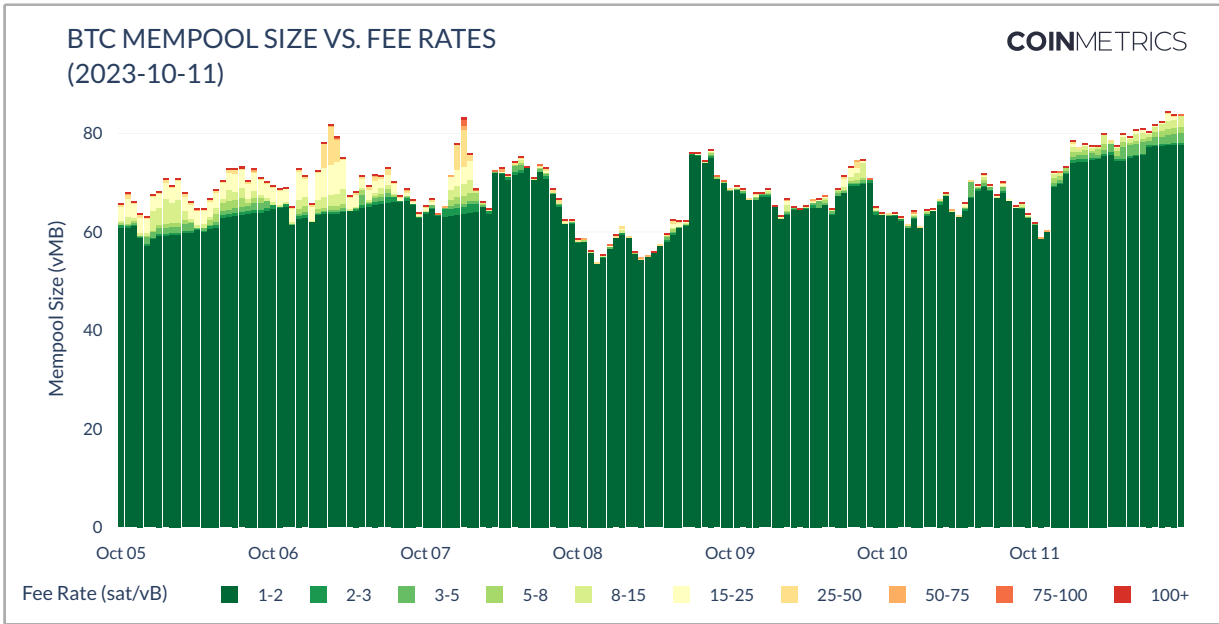
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-2.65%	415	514	170
USDT_OMNI	+5,503.72%	703	2,678	11
USDT_TRX	+4.06%	132	147	119
PAX	+339.94%	3,912	13,367	544
DAI	+10.29%	1,071	1,470	500
USDC	+44.47%	674	997	426
BUSD	-6.49%	214	528	90
GUSD	+1,504.37%	344	1,105	10

VELOCITY

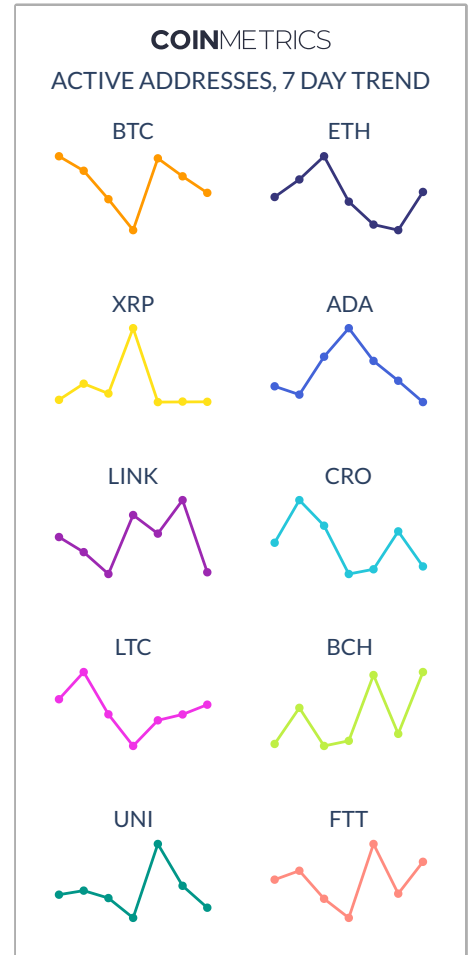
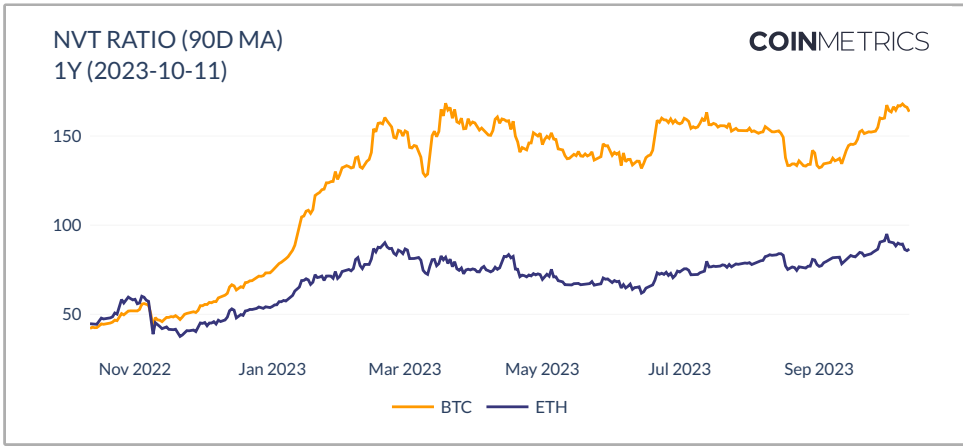
Number of times that an average native unit among the active supply has been transferred in the past 1 year

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+3.72%	37.87	38.32	36.93
USDT_OMNI	-1.98%	30.63	30.82	30.21
USDT_TRX	+0.54%	73.01	73.23	72.84
PAX	-0.13%	37.03	37.07	37.01
DAI	-1.82%	130.29	132.90	129.17
USDC	-0.42%	112.36	113.67	111.67
BUSD	+2.62%	70.36	71.79	69.54
GUSD	+2.41%	24.56	24.70	24.08

FEE MARKET



NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-8.39%	887,800	946,720	786,381
ETH	+0.87%	482,220	516,226	454,991
XRP	-1.49%	24,097	33,992	21,610
ADA	-6.41%	31,622	37,054	28,055
LINK	-20.04%	2,874	3,550	2,317
CRO	-10.12%	245	292	214
LTC	-1.39%	216,889	238,684	196,403
BCH	+793.17%	120,610	271,746	23,670
UNI	-12.50%	826	1,189	622
FTT	+16.28%	85	114	56

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.02%	13,719,050	13,720,681	13,717,278
ETH	-0.00%	109,569,769	109,597,782	109,507,820
XRP	+0.12%	47,127,017,282	47,160,919,965	47,101,459,316
ADA	+0.08%	30,702,126,660	30,710,716,303	30,685,523,597
LINK	-0.01%	545,260,534	545,284,937	545,228,411
CRO	-0.00%	9,490,670,068	9,490,808,093	9,490,593,744
LTC	+0.03%	62,379,766	62,385,307	62,369,532
BCH	+0.03%	13,177,054	13,178,893	13,175,240
UNI	-0.03%	248,294,723	248,348,997	248,272,297
FTT	+0.00%	328,895,104	328,895,104	328,895,104

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-17.26%	275,660	321,037	242,646
ETH	+5.23%	982,272	1,005,950	924,403
XRP	+5.69%	1,074,408	1,198,740	1,023,987
ADA	-5.15%	52,465	54,699	48,150
LINK	-12.20%	3,724	4,561	2,953
CRO	-10.38%	276	317	233
LTC	-2.36%	107,671	115,196	102,501
BCH	+1,822.55%	110,420	304,628	10,628
UNI	-13.24%	936	1,413	758
FTT	+4.24%	117	221	51

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+26.30%	3,277,942,619	4,299,743,184	2,020,358,213
ETH	-4.32%	2,206,516,776	2,665,066,684	1,526,633,766
XRP	+36.35%	462,674,538	770,981,062	130,820,244
ADA	-18.37%	4,307,512,196	4,937,511,063	3,805,744,613
LINK	+95.97%	72,170,474	117,457,434	25,506,225
CRO	-3.90%	6,928,764	25,199,280	357,942
LTC	+10.79%	49,939,695	55,718,857	42,077,348
BCH	-3.10%	19,058,497	22,301,664	14,045,433
UNI	-58.74%	9,682,015	18,125,168	4,540,402
FTT	-69.23%	1,546,087	5,259,016	381,558

ADDRESSES ≥ \$1

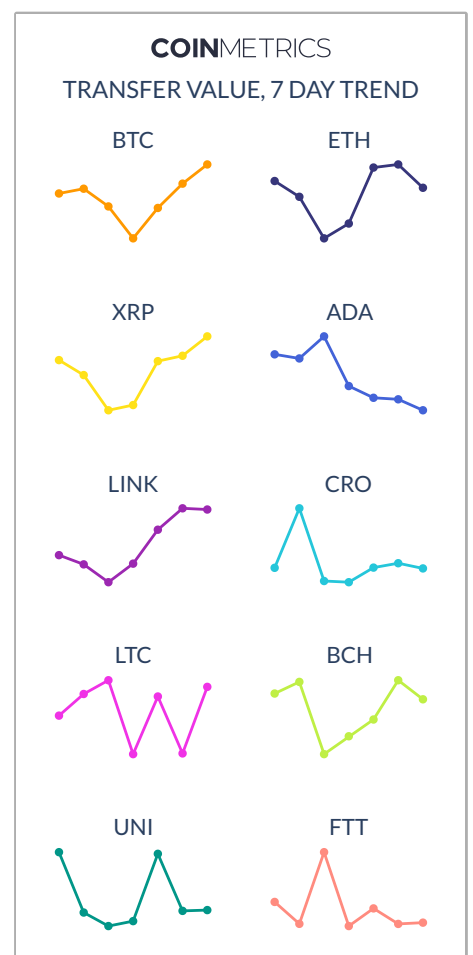
Count of addresses holding at least \$1 worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-0.30%	40,599,546	40,713,420	40,461,752
ETH	-0.82%	58,918,465	59,329,596	58,504,156
XRP	+0.12%	4,814,675	4,817,560	4,811,770
ADA	-0.60%	3,543,209	3,555,807	3,527,623
LINK	-0.13%	535,881	536,603	535,002
CRO	-0.39%	149,044	149,331	148,655
LTC	-0.47%	2,313,164	2,323,032	2,305,173
BCH	-1.67%	4,524,655	4,555,558	4,479,313
UNI	-0.05%	285,874	286,328	285,390
FTT	-1.59%	21,685	21,837	21,489

ADDRESSES ≥ \$1M

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-0.94%	71,967	72,351	71,190
ETH	-2.10%	9,169	9,347	9,008
XRP	-7.60%	1,158	1,191	1,094
ADA	-4.76%	743	765	721
LINK	+1.34%	447	456	434
CRO	+4.55%	22	23	22
LTC	-3.29%	423	428	412
BCH	-4.03%	341	347	331
UNI	-0.36%	276	279	275
FTT	-7.69%	13	13	12



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
- **CMBISCPPE:** 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 10/8/2023 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 10/8/2023 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.