

STATE OF THE MARKET

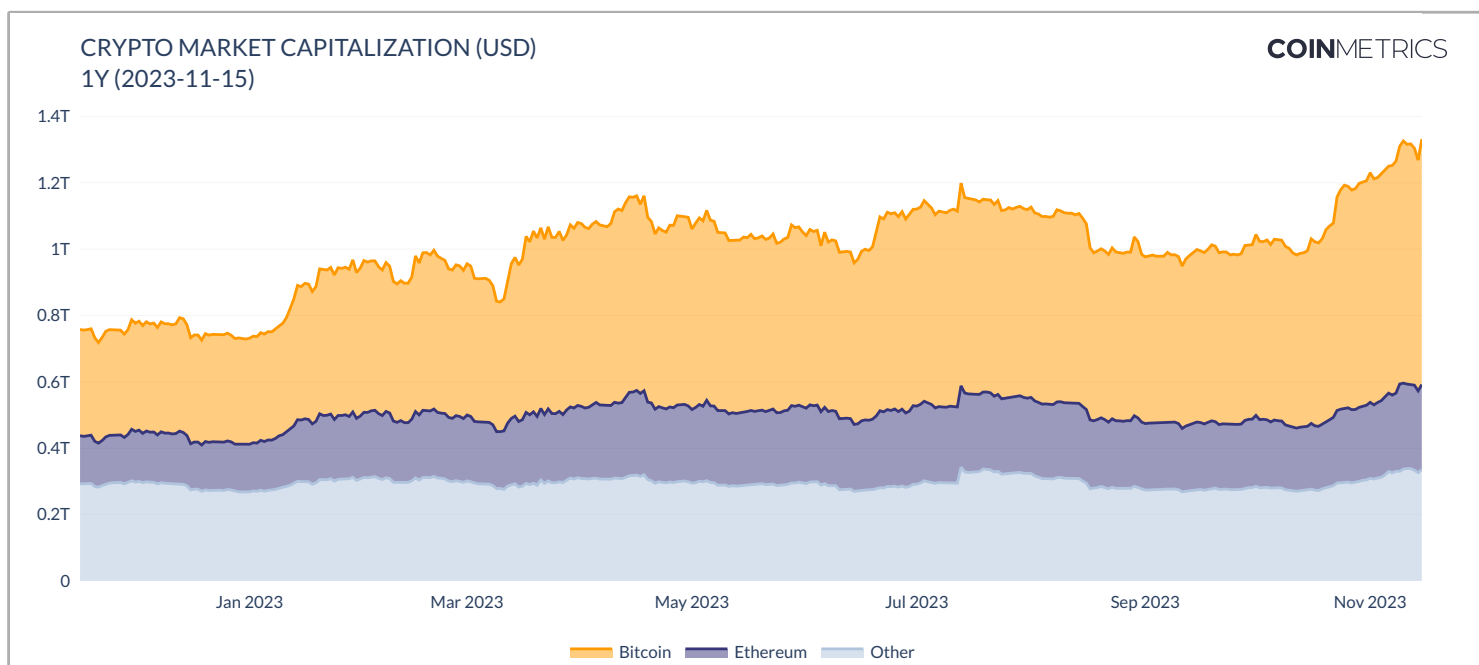
NOV. 9 - 15, 2023

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

A large, stylized logo consisting of the letters 'C' and 'M' in a light blue gradient. The 'C' is a thick, rounded shape, and the 'M' is composed of several sharp, angular lines, creating a modern and abstract look.

MARKET SUMMARY

Crypto investors are having Trust issues, with spurious fund filings stirring up an excess of market froth. Following BlackRock's confirmed filing for an Ethereum spot ETF last week, a near-identical application for an XRP trust appeared on the Delaware Division of Corporation website on Monday. In short order, XRP was sent soaring +12%, but the the registration was swiftly debunked by BlackRock representatives, forcing Ripple's flagship token to surrender the entire rally. Delaware authorities have referred the fraudulent registration of "iShares XRP Trust" to the state's Department of Justice, with commentators apprehensively musing whether the situation gives weight to the SEC's characterizations of 'market manipulation' in crypto. Late Wednesday, the SEC delayed a decision regarding Hashdex's bid to convert their existing Bitcoin futures ETF (Ticker: DEFI) into a spot vehicle, with another decision/delay deadline quickly approaching for Franklin Templeton's spot ETF application on November 17. Grayscale's application for an Ether futures ETF was also delayed, though some analysts assert the filing is merely a "trojan horse" to help the asset manager corner the SEC into approving their spot ETF equivalent. The firm's Grayscale Bitcoin Trust (GBTC) has been a major point of focus for the industry, with CEO Michael Sonnenshein teasing "It's been a ten year dress rehearsal. We're ready for the main event" on X early Monday. The hedge fund-wrecking GBTC discount to NAV has narrowed to just 10%, but Grayscale's suite of smaller trusts are beginning to trade at eye-watering multiples, with the Solana trust (GSOL) and Chainlink trust (GLNK) briefly trading at 869% and 250% premiums, respectively. On Monday, the digital assets arm of the Chicago Board Options Exchange (CBOE) announced plans to offer margined BTC and ETH futures, with a target start date of January 11, 2024— one day after a major SEC spot BTC ETF approval deadline. With the launch, CBOE purports they will become "the first U.S. regulated crypto native combined exchange and clearinghouse" to enable spot and leveraged derivatives trading on a single platform, fostering "additional liquidity and hedging opportunities" in the sector. CBOE's chief rival Chicago Mercantile Exchange (CME) has garnered major attention in recent weeks, especially as open interest on CME Bitcoin futures surpasses that of Binance, skyrocketing from \$2B to \$4B in the short span of 1 month. Meanwhile, Justin Sun-owned crypto exchange Poloniex has suffered a \$100M+ breach, with analysts flagging a set of suspiciously large ERC-20 and TRC-20 token outflows on Friday. Though Sun claims the "losses are within manageable limits," the exchange's deposits and withdrawals have been frozen for several days, with a Wednesday announcement stating that "full services" will resume following "a top-tier audit that is nearing completion." As volatility explodes and regulations tighten, the double-edged sword of being a "crypto-native" exchange will shine an ever-brighter light on the industry's unacceptable gaps in institutional-grade infrastructure.



PRICE (CMBI CONSTITUENTS)

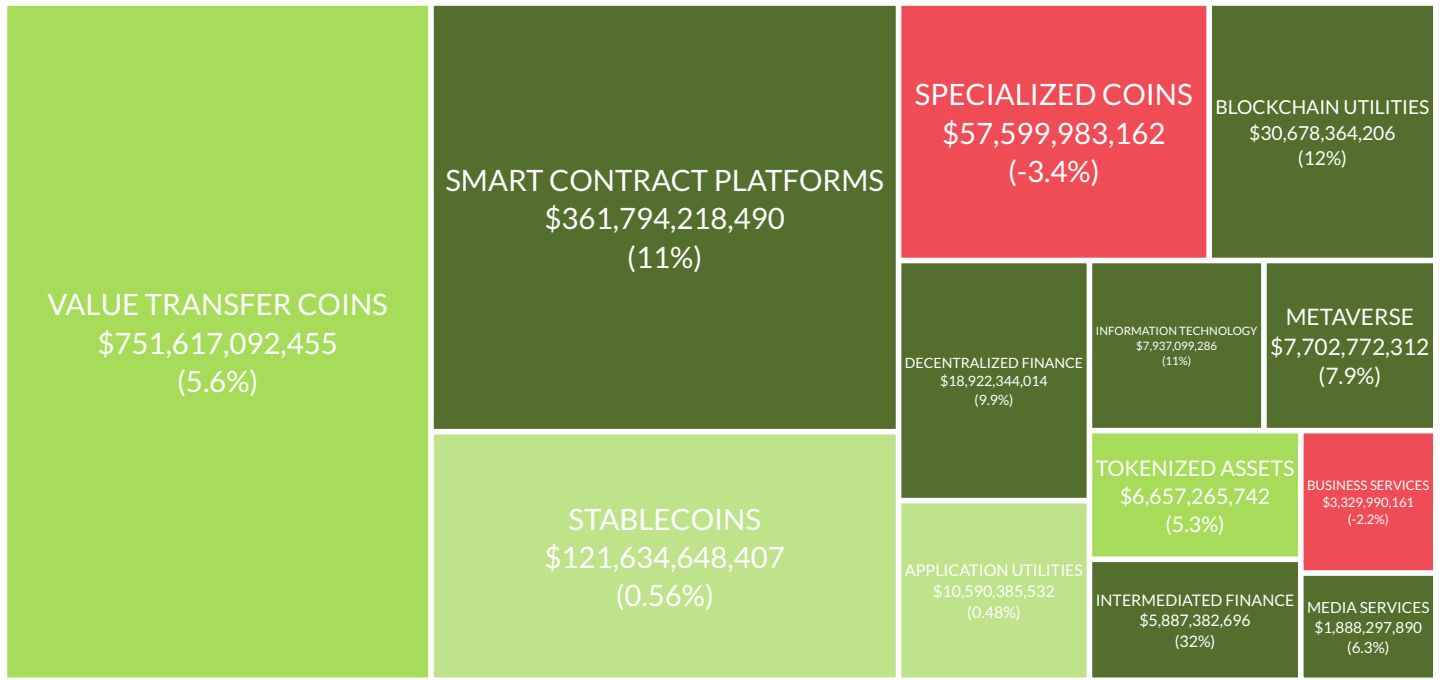
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
BTC	\$37,556.83	+3.29%	\$37,556.83	\$35,338.27	+125.42%	\$37,556.83	\$15,799.60
ETH	\$2,049.67	+1.14%	\$2,093.88	\$1,982.24	+70.66%	\$2,129.88	\$1,103.83
SOL	\$66.25	+51.11%	\$66.25	\$43.84	+388.90%	\$66.25	\$8.35
ADA	\$0.38	+5.90%	\$0.39	\$0.35	+15.82%	\$0.45	\$0.24
DOGE	\$0.08	+6.24%	\$0.08	\$0.07	-10.97%	\$0.10	\$0.06
TRX	\$0.10	+6.04%	\$0.11	\$0.10	+107.58%	\$0.11	\$0.05
MATIC	\$0.91	+14.39%	\$0.93	\$0.80	+4.06%	\$1.52	\$0.50
BNB	\$252.56	+3.34%	\$252.92	\$240.11	-5.72%	\$348.71	\$204.88
AVAX	\$20.73	+66.08%	\$20.73	\$12.48	+59.77%	\$22.04	\$8.82
LINK	\$15.20	+7.28%	\$16.30	\$14.17	+140.71%	\$16.30	\$5.09
CMBI10	\$3,798.16	+4.17%	\$3,798.16	\$3,590.01	+93.18%	\$3,798.16	\$1,838.40

ASSET CLASSES

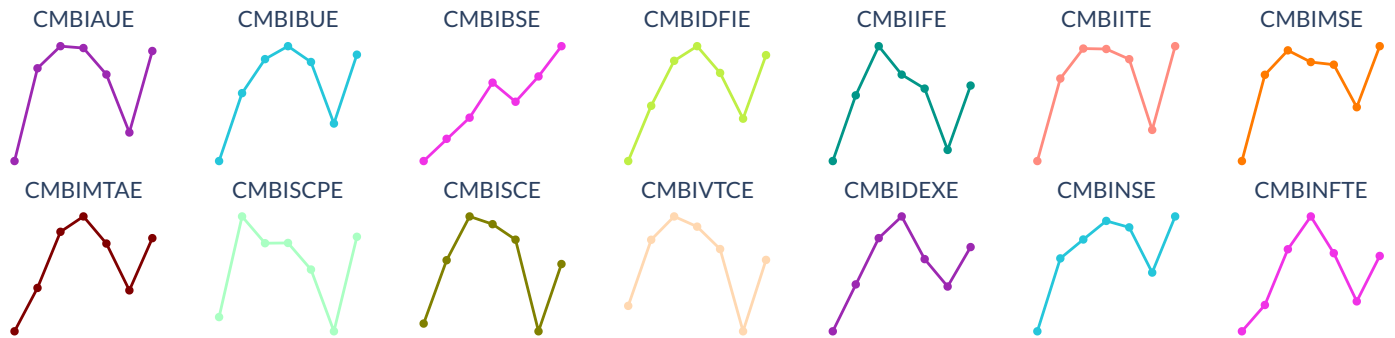
DIGITAL ASSET SECTOR 7D MARKETCAP (2023-11-15)

COINMETRICS



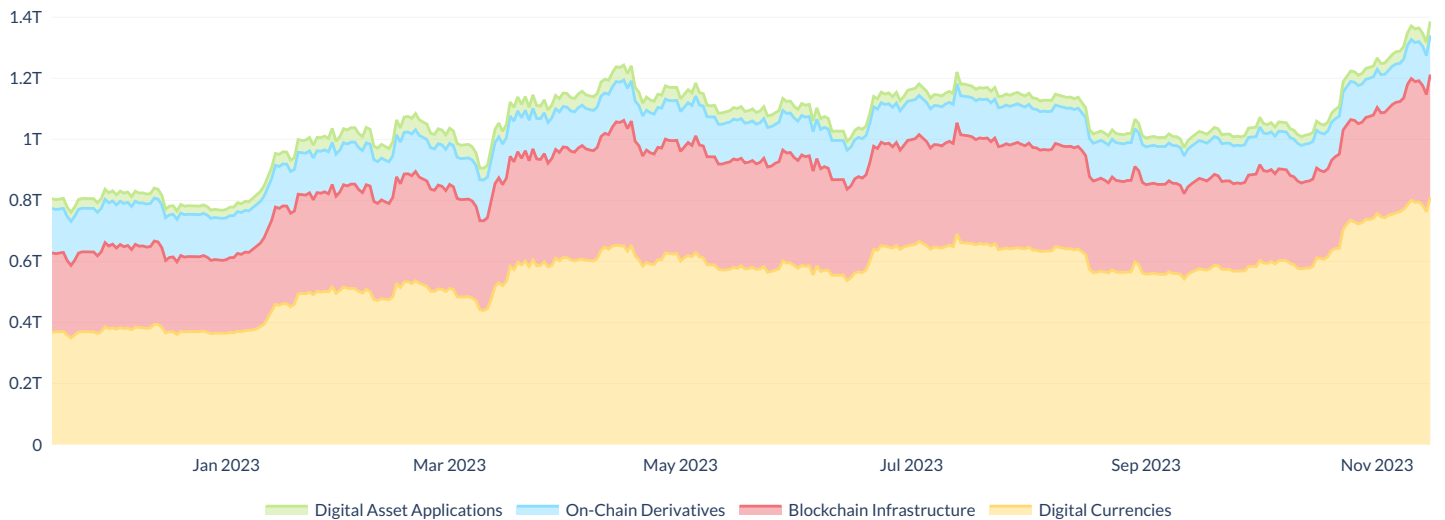
TRENDING SECTOR INDEXES, 7 DAY TREND

COINMETRICS



CRYPTO MARKET CAPITALIZATION (USD)
BY DATONOMY CLASS

COINMETRICS

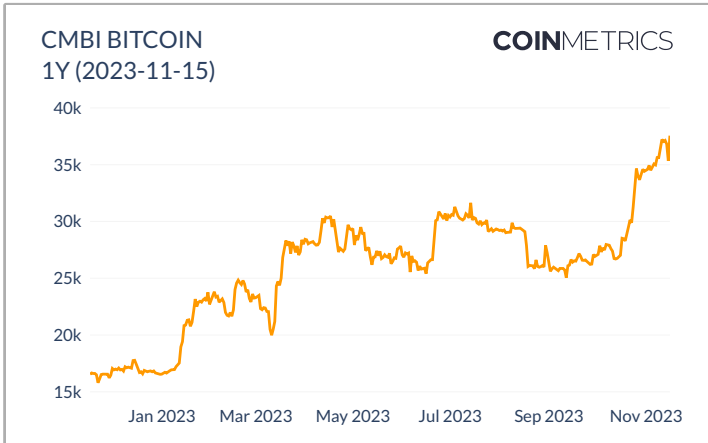


INDEX ROUNDUP

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	\$37,556.83	+3.29%	\$37,556.83	\$35,338.27	+125.42%	\$37,556.83	\$15,799.60
CMBIBTCT	\$40,350.62	+3.29%	\$40,350.62	\$37,967.03	+125.42%	\$40,350.62	\$16,974.91
CMBIETH	\$2,049.67	+1.14%	\$2,093.88	\$1,982.24	+70.66%	\$2,129.88	\$1,103.83
CMBIETHHT	\$2,225.11	+1.14%	\$2,273.10	\$2,151.90	+70.66%	\$2,312.19	\$1,198.31



MULTI ASSET INDEXES

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

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$3,798.16	+4.17%	\$3,798.16	\$3,590.01	+93.18%	\$3,798.16	\$1,838.40
CMBI10E	\$6,424.94	+15.98%	\$6,424.94	\$5,539.90	+56.28%	\$6,424.94	\$3,409.70
CMBI10EX	\$7,767.25	+5.56%	\$7,767.25	\$7,357.91	+56.48%	\$7,991.44	\$4,562.49
CMBI10M	\$13,686.82	+15.59%	\$13,686.82	\$11,840.83	+42.08%	\$13,686.82	\$9,310.27
CMBIBE	\$18,306.01	+2.58%	\$18,306.01	\$17,381.81	+104.67%	\$18,306.01	\$8,387.96



MARKET MOVEMENT

TRADING DIARY, 7 DAY

ADVANCING VOLUME \$181,302,413,851

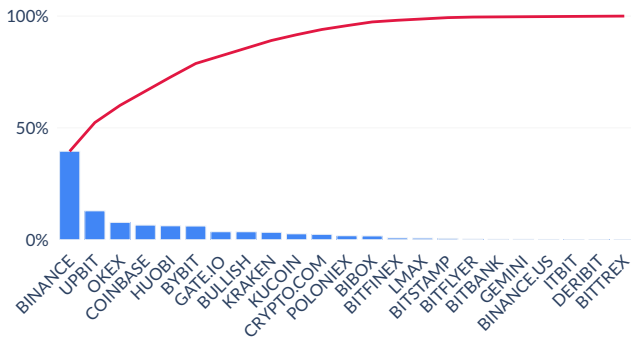
DECLINING VOLUME \$66,441,841,767

ADVANCES 398

DECLINES 321

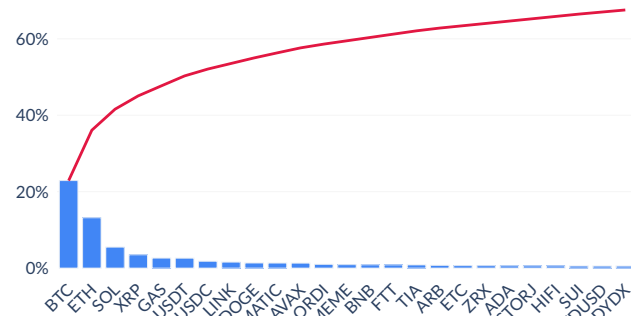
EXCHANGE SPOT SHARE, 7 DAY MEAN

COINMETRICS



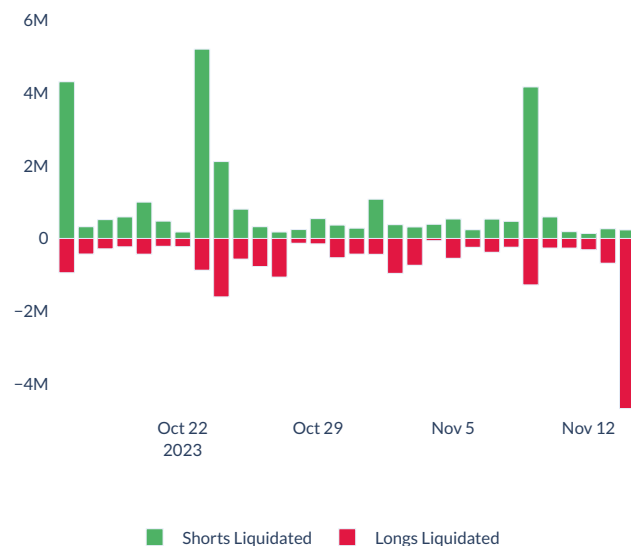
BASE ASSET SPOT SHARE, 7 DAY MEAN

COINMETRICS



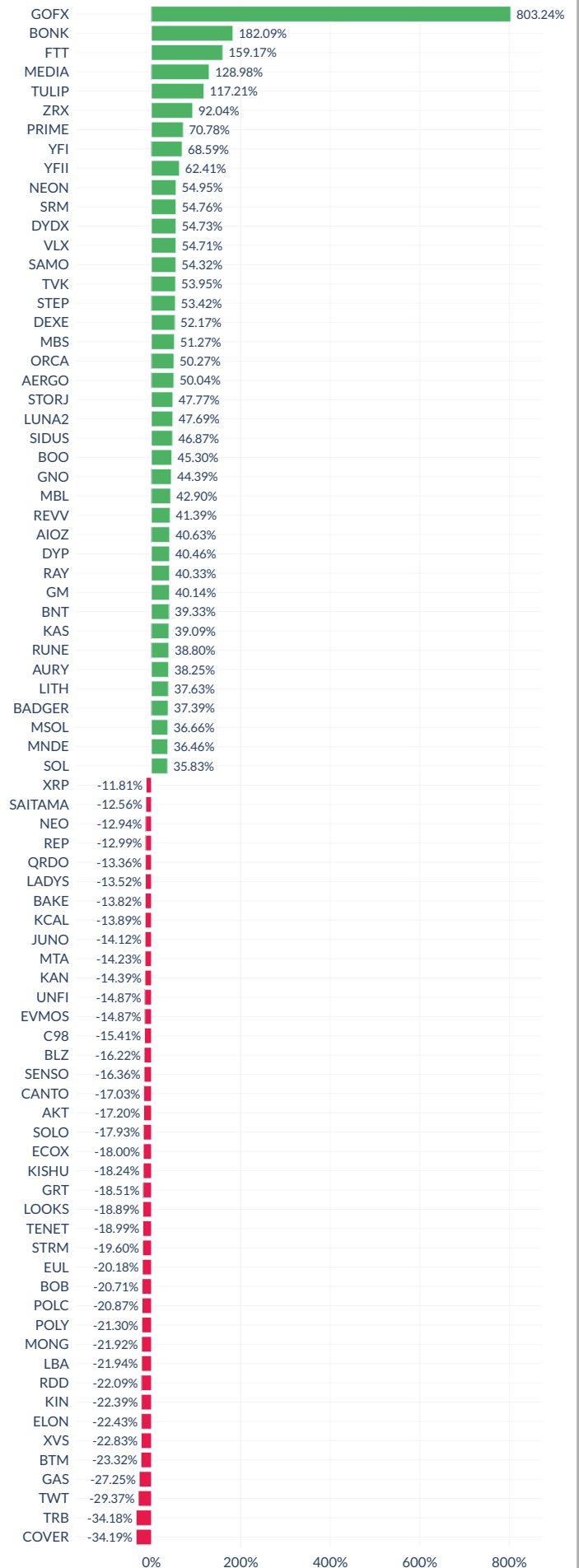
BTC PERPETUALS, TOTAL LIQUIDATIONS

COINMETRICS

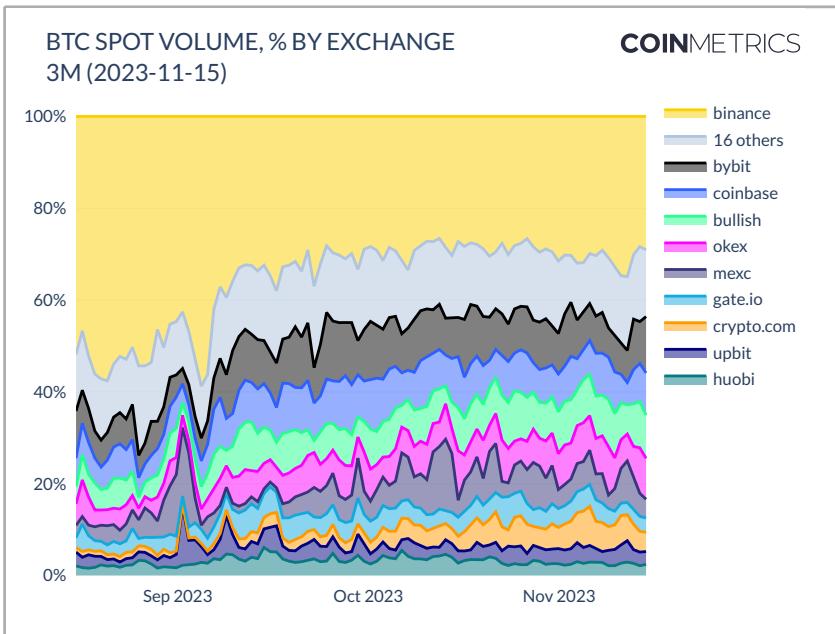
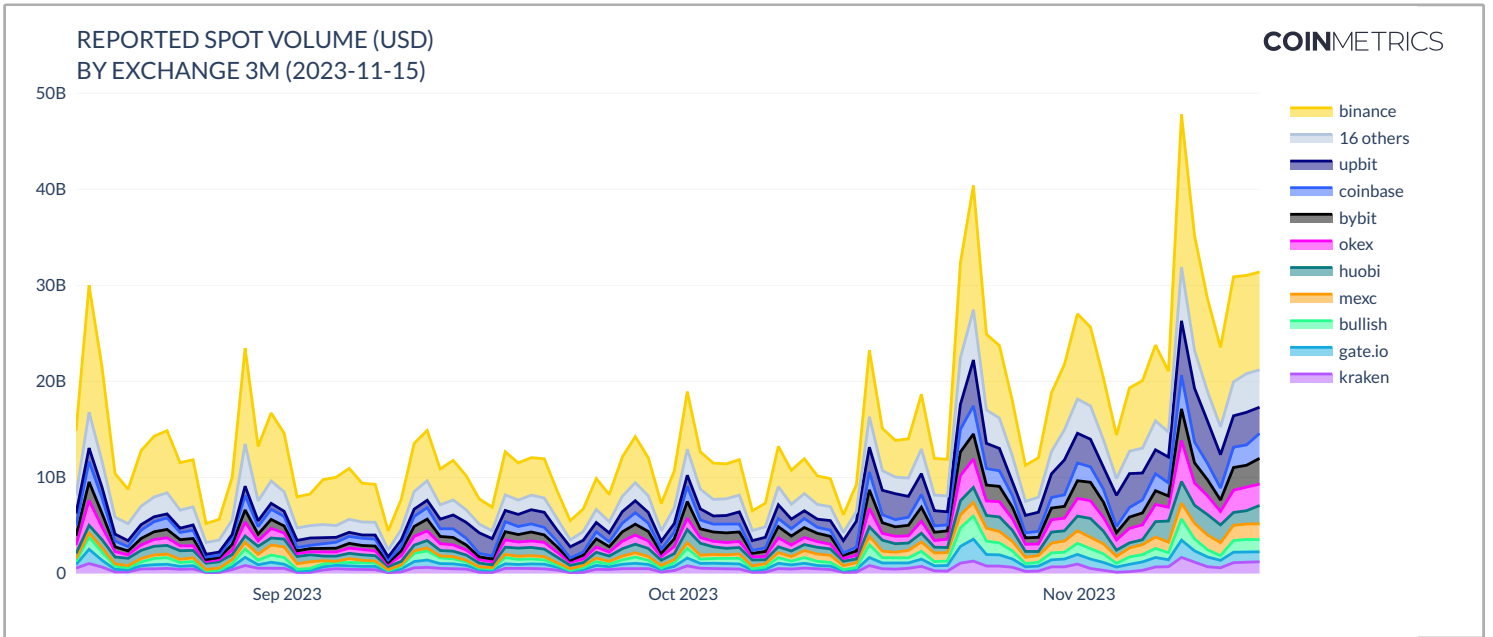


PRICE CHANGE, 7 DAY

COINMETRICS



AGGREGATE VOLUME



BTC SPOT VOLUME LEADERS

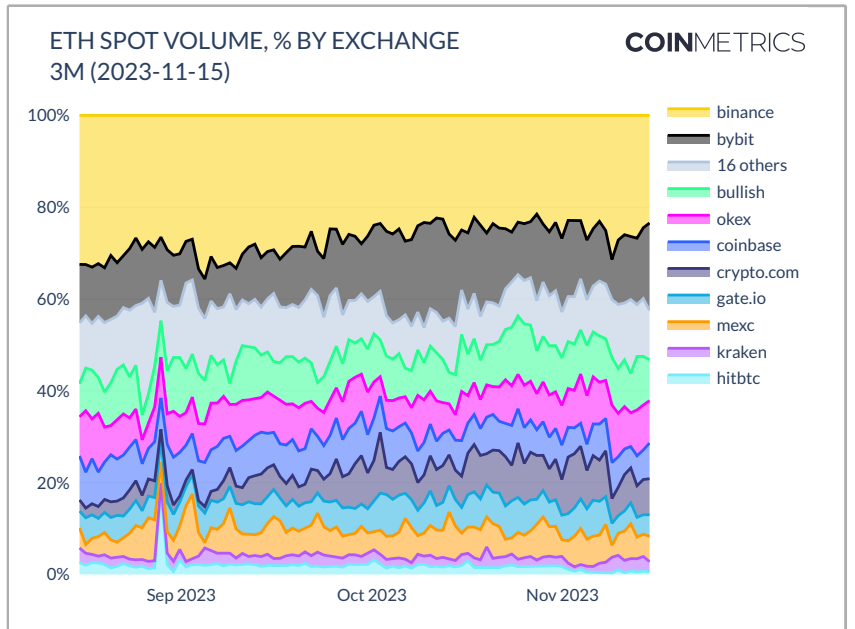
Top 10 exchanges by Bitcoin (BTC) spot volume reported over past 3 months.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BINANCE	-37.34%	2,235,058,599	4,142,463,505	1,106,679,187
BYBIT	+28.19%	628,602,960	1,096,244,681	221,369,086
COINBASE	-33.98%	603,497,701	1,242,931,170	154,031,382
BULLISH	-39.08%	685,945,212	1,381,889,610	201,292,838
OKEX	-44.03%	615,448,368	1,420,181,268	185,687,276
MEXC	-7.90%	363,119,927	439,748,589	287,219,836
GATE.IO	-46.76%	238,255,458	525,961,962	83,757,635
CRYPTO.COM	-46.55%	369,170,538	697,827,358	180,153,613
UPBIT	-44.44%	239,514,930	449,317,849	148,053,576
HUOBI	-25.13%	170,139,180	289,703,065	92,527,915

ETH SPOT VOLUME LEADERS

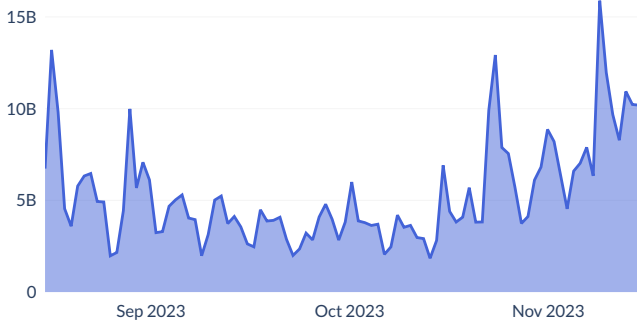
Top 10 exchanges by Ethereum (ETH) spot volume reported over past 3 months.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BINANCE	-61.59%	1,352,847,163	2,735,354,995	702,021,530
BYBIT	+12.61%	681,970,131	853,536,596	368,730,116
BULLISH	-55.77%	506,619,724	904,786,946	228,713,453
OKEX	-62.09%	505,493,648	1,091,551,826	196,431,555
COINBASE	-48.97%	338,181,062	683,092,379	124,198,898
CRYPTO.COM	-25.48%	338,770,171	470,635,941	202,716,071
GATE.IO	-49.28%	220,724,403	417,832,716	122,128,234
MEXC	+9.05%	235,456,579	265,148,160	202,575,857
KRAKEN	-66.90%	147,997,489	295,403,187	72,314,827
HITBTC	-11.68%	30,424,211	56,102,627	14,894,922

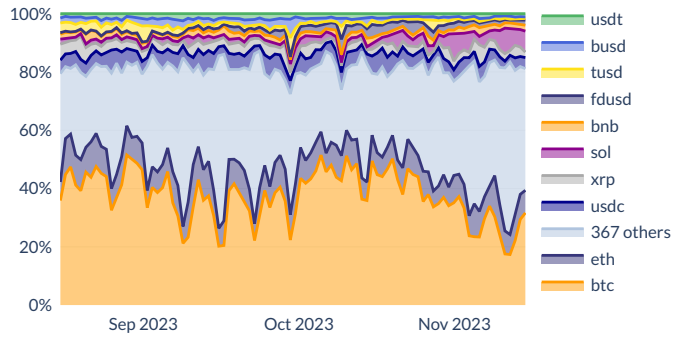


EXCHANGE SPOT VOLUME

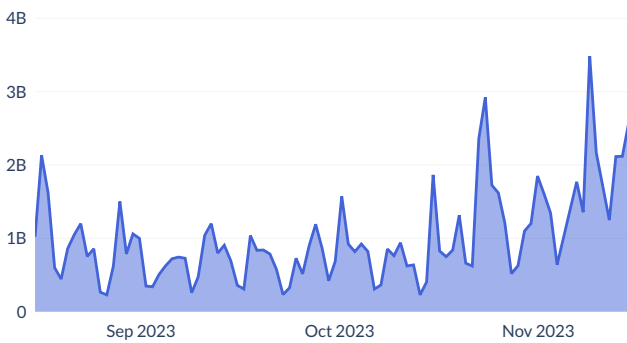
BINANCE DAILY USD SPOT VOLUME 3M (2023-11-15) COINMETRICS



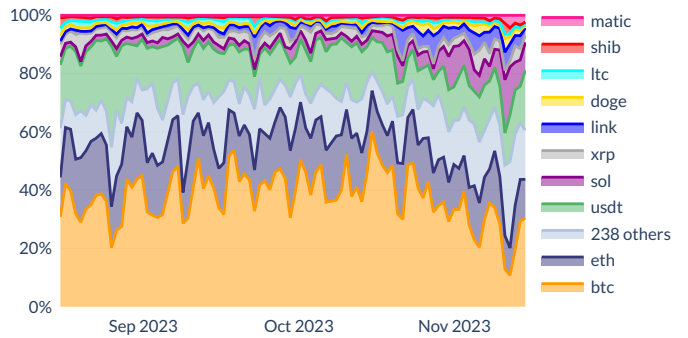
BINANCE SPOT VOLUME, % BY ASSET 3M (2023-11-15) COINMETRICS



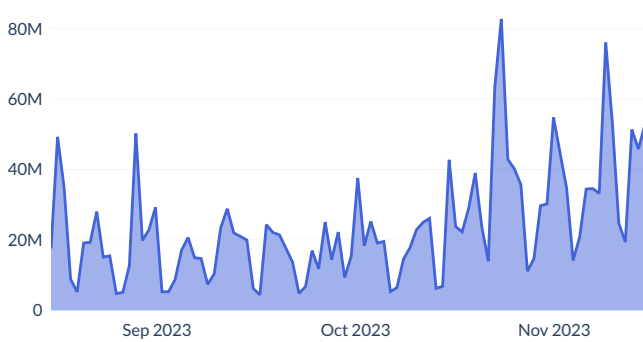
COINBASE DAILY USD SPOT VOLUME 3M (2023-11-15) COINMETRICS



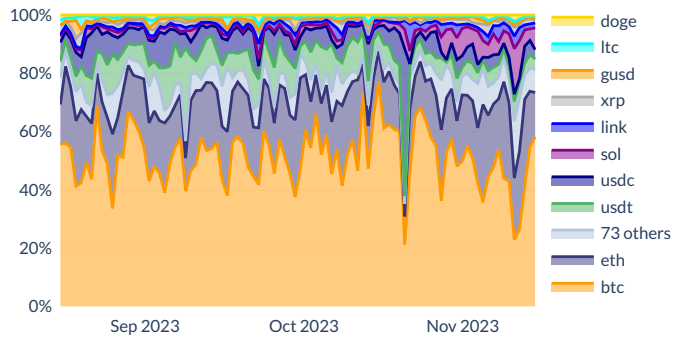
COINBASE SPOT VOLUME, % BY ASSET 3M (2023-11-15) COINMETRICS



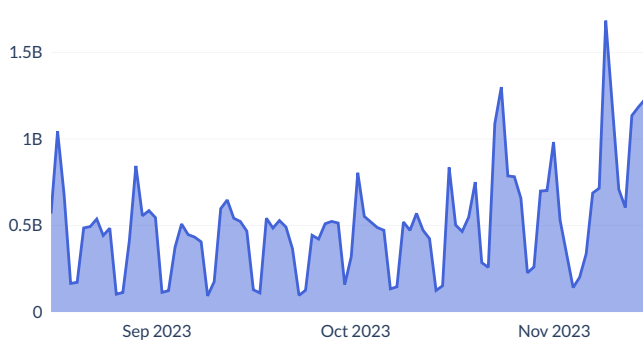
GEMINI DAILY USD SPOT VOLUME 3M (2023-11-15) COINMETRICS



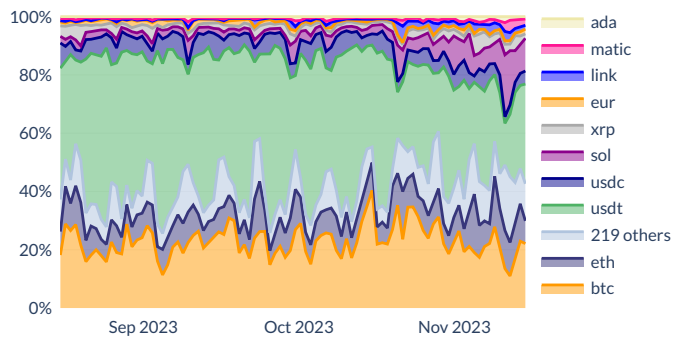
GEMINI SPOT VOLUME, % BY ASSET 3M (2023-11-15) COINMETRICS



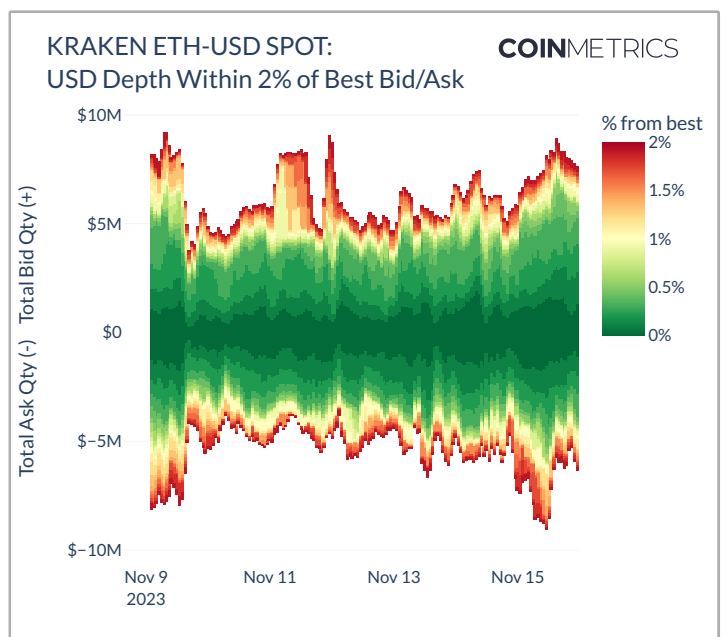
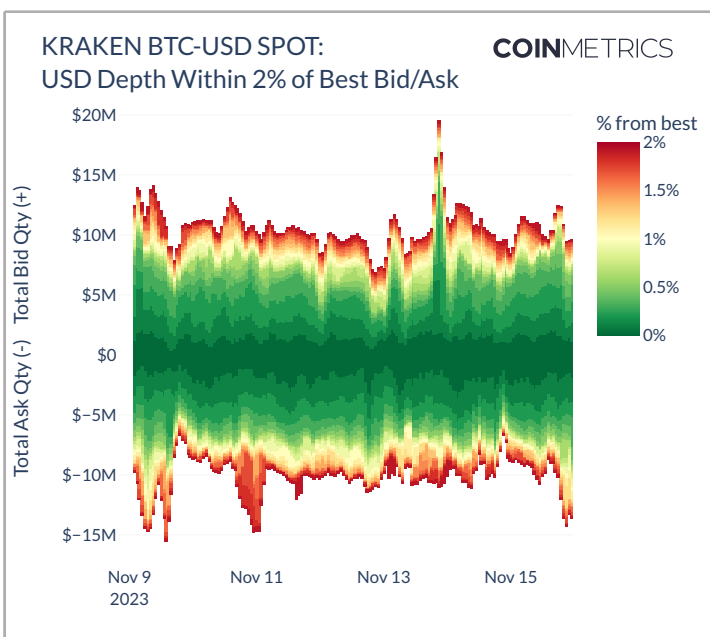
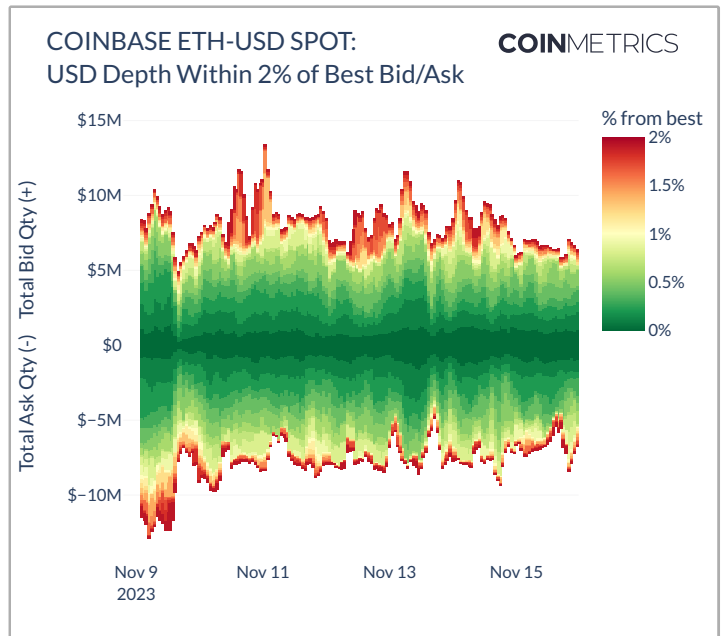
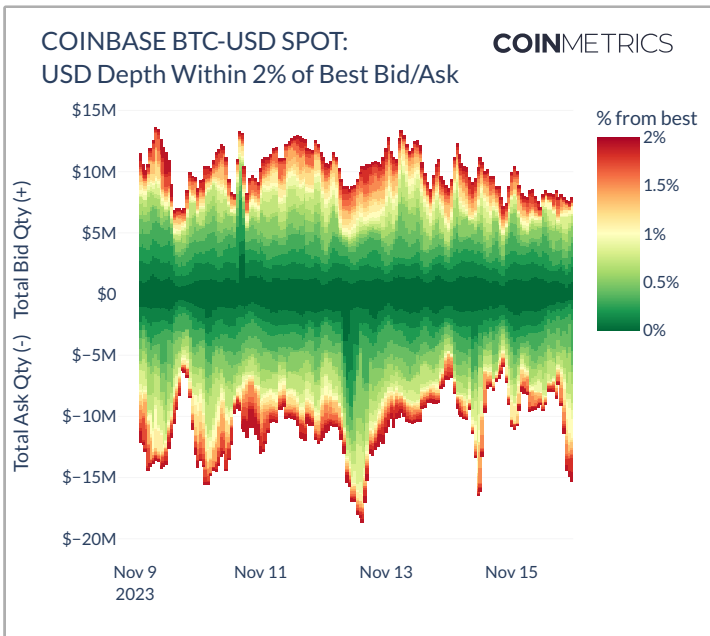
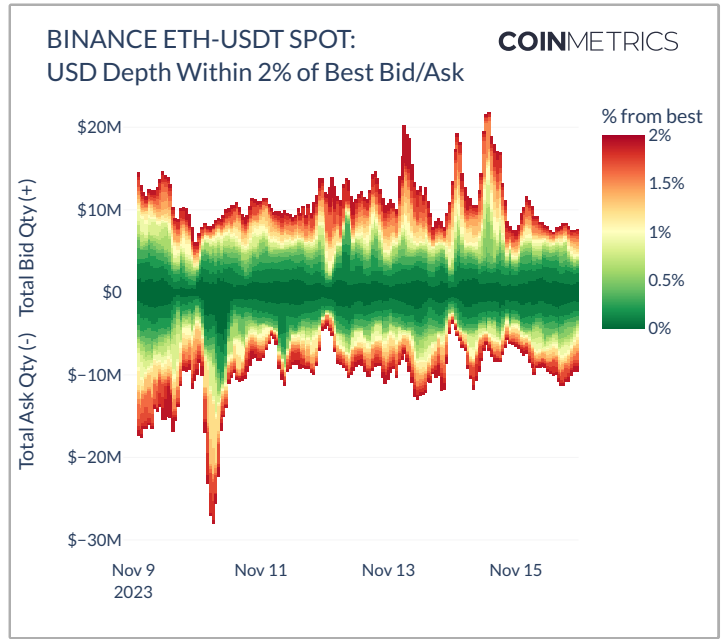
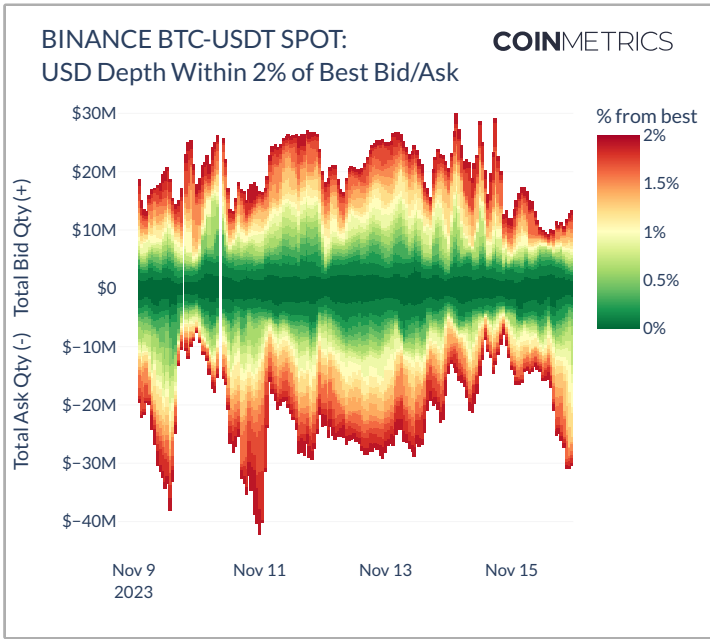
KRAKEN DAILY USD SPOT VOLUME 3M (2023-11-15) COINMETRICS



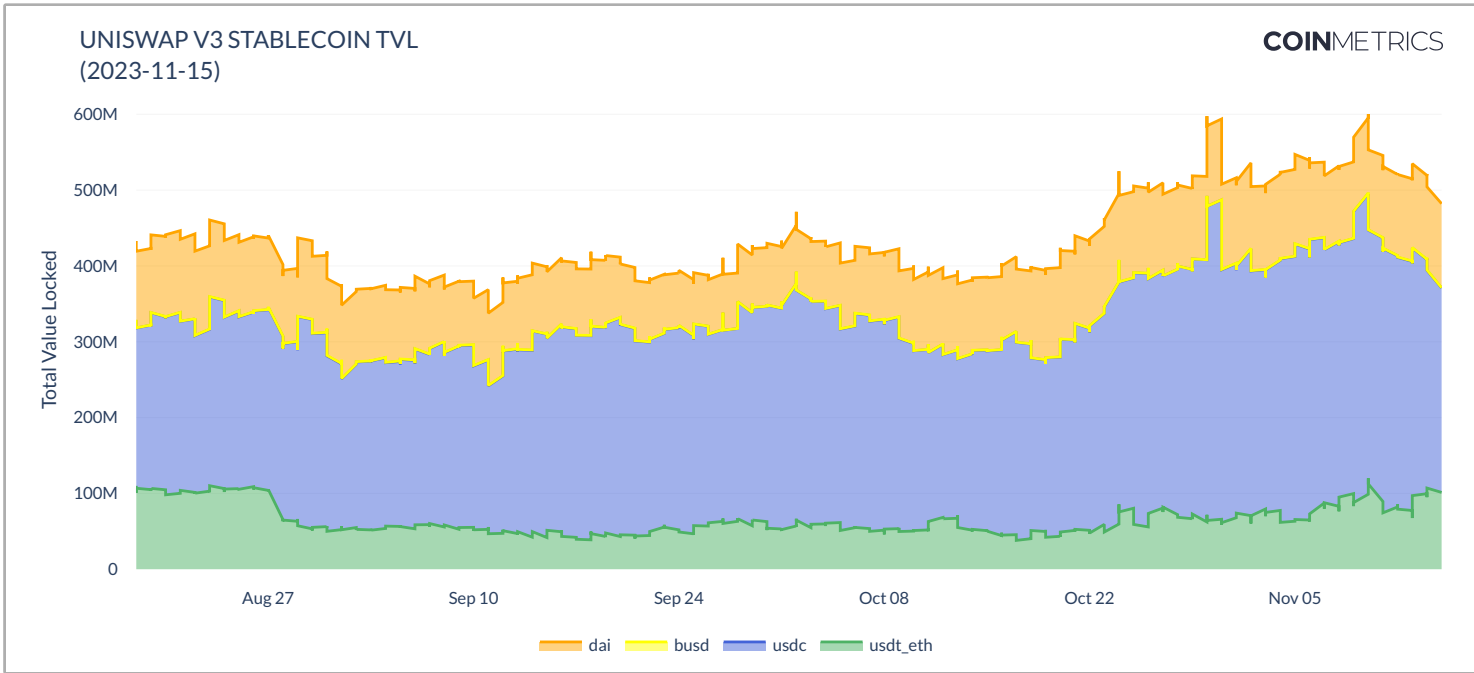
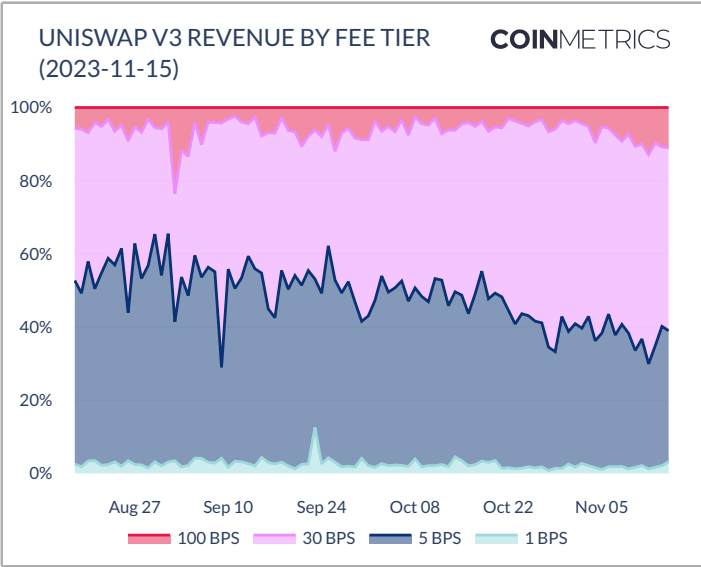
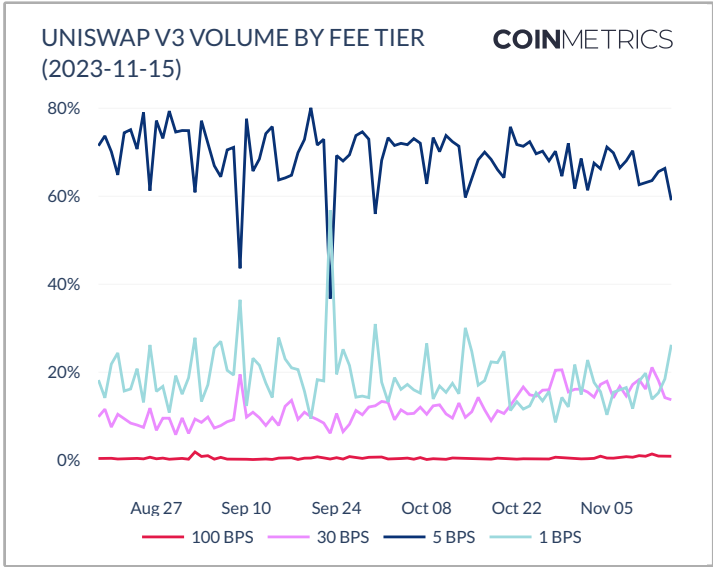
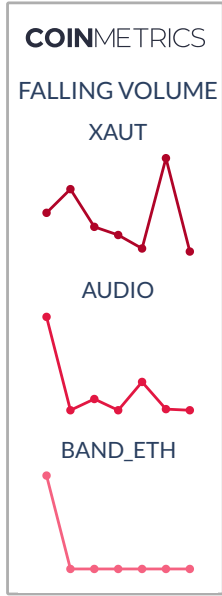
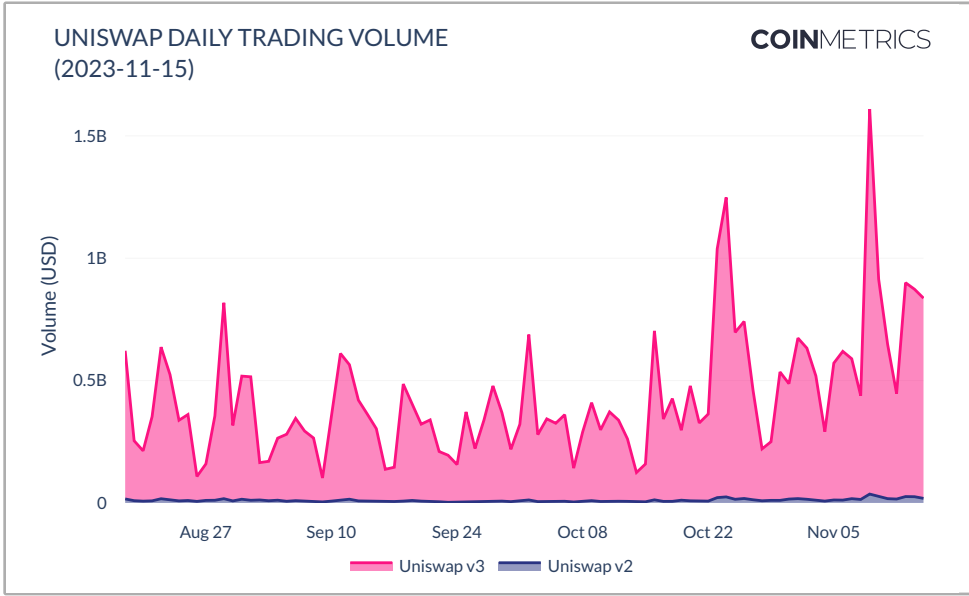
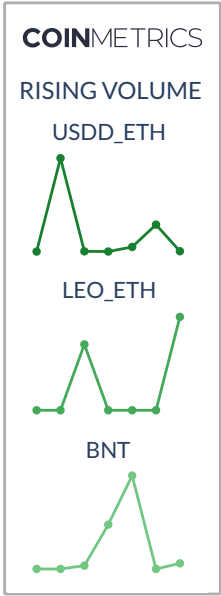
KRAKEN SPOT VOLUME, % BY ASSET 3M (2023-11-15) COINMETRICS



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 (2023-11-15)

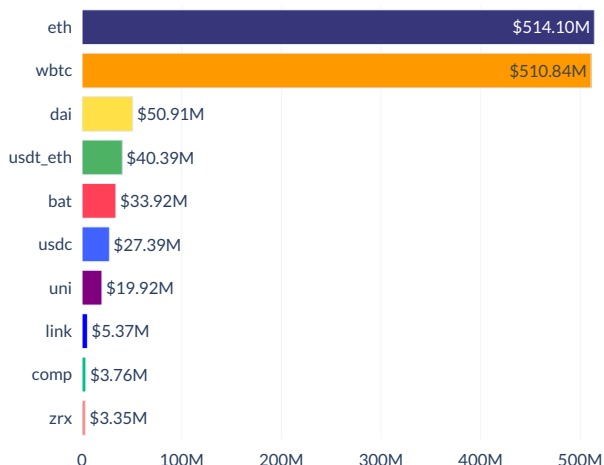
COINMETRICS



COMPOUND V2 BALANCE SHEET

PROTOCOL HEALTH RATIOS	VALUE	7D CHANGE
CURRENT RATIO	0.739865	0.19%
DEBT TO ASSETS RATIO	0.969848	-0.11%
PROTOCOL UTILIZATION RATIO	0.291226	-0.07%
LIQUID SUPPLY RATIO	0.739865	0.19%
ASSETS AND LIABILITIES	VALUE	7D CHANGE
ASSETS TOTAL USD	\$1,610M	-3.4%
ASSETS TOTAL COUNT	19	0.0%
LIABILITIES TOTAL USD	\$1,562M	-3.51%
LIABILITIES TOTAL COUNT	19	0.0%
LOANS LENT TOTAL USD	\$455M	-3.58%
TVL TOTAL USD	\$1,156M	-3.32%
NET WORKING CAPITAL USD	-\$406M	-4.02%

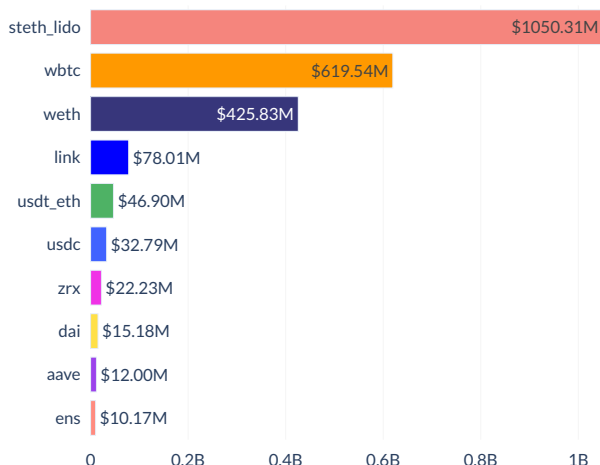
TOP 10 ASSETS BY TOTAL VALUE LOCKED (USD)



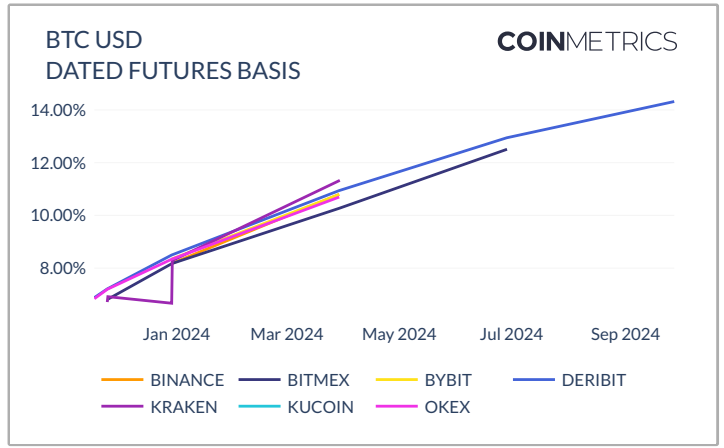
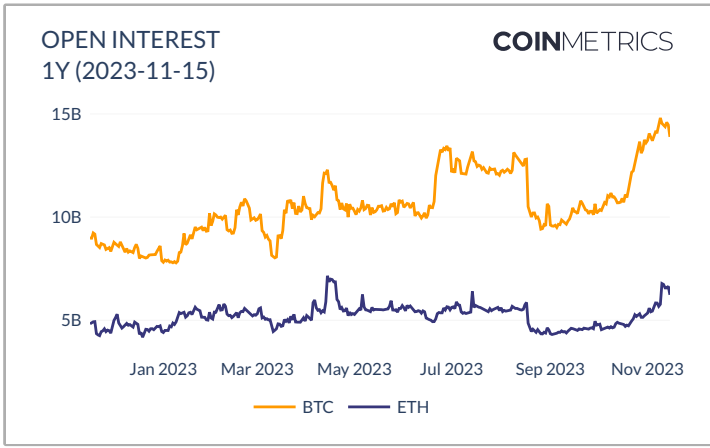
AAVE V2 BALANCE SHEET

PROTOCOL HEALTH RATIOS	VALUE	7D CHANGE
CURRENT RATIO	0.680432	-0.9%
DEBT TO ASSETS RATIO	1.000246	0.01%
PROTOCOL UTILIZATION RATIO	0.319323	1.95%
LIQUID SUPPLY RATIO	0.680432	-0.9%
ASSETS AND LIABILITIES	VALUE	7D CHANGE
ASSETS TOTAL USD	\$3,365M	-3.68%
ASSETS TOTAL COUNT	52	0.0%
LIABILITIES TOTAL USD	\$3,366M	-3.67%
LIABILITIES TOTAL COUNT	52	0.0%
LOANS LENT TOTAL USD	\$1,075M	-1.8%
TVL TOTAL USD	\$2,291M	-4.54%
NET WORKING CAPITAL USD	-\$1,076M	-1.77%

TOP 10 ASSETS BY TOTAL VALUE LOCKED (USD)



FUTURES FEED



OPEN INTEREST

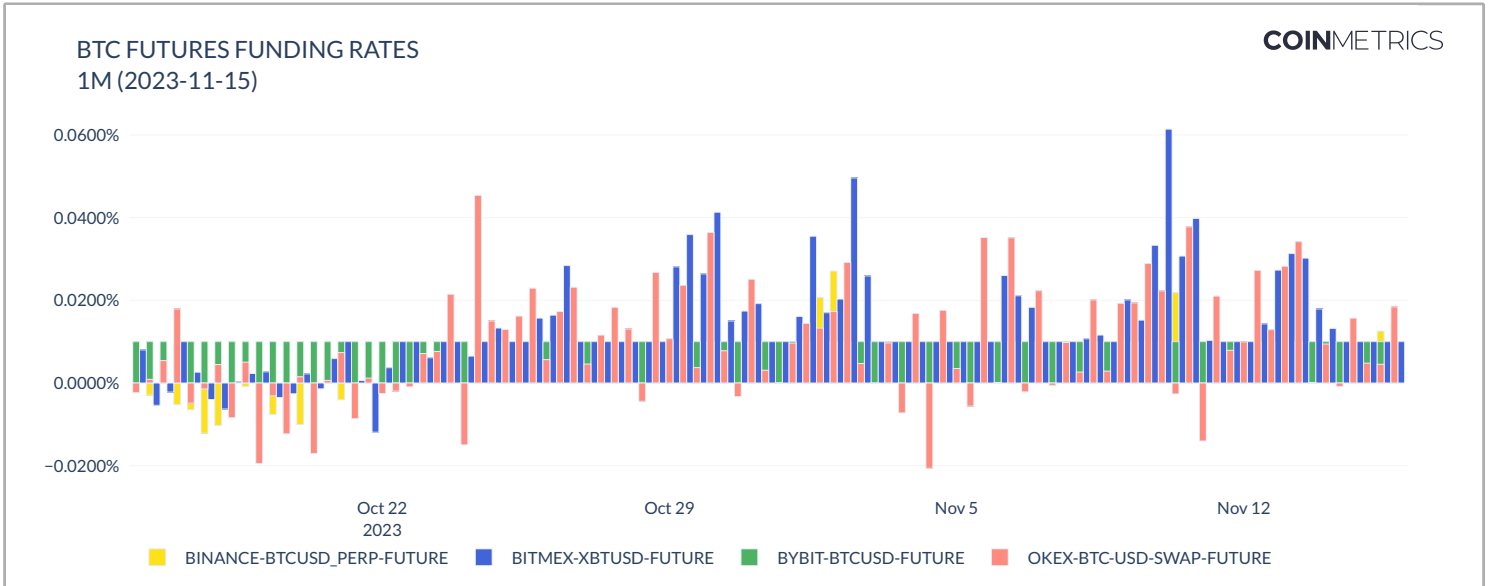
Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-6.21%	14,450,017,867	14,806,288,154	13,887,399,625
ETH	+7.93%	6,473,549,110	6,780,749,962	5,776,246,518
XRP	-22.80%	538,713,297	620,311,151	478,854,078
LINK	-25.94%	323,766,768	363,748,441	268,979,598
ADA	-8.28%	131,110,246	134,584,782	123,442,133
CRO	+8.70%	8,122,115	9,938,462	6,870,244
LTC	-6.19%	227,962,400	238,700,850	222,867,153
UNI	-20.95%	60,945,067	70,163,025	55,463,068
BCH	-16.08%	170,786,107	193,819,857	162,648,714

FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-44.54%	38,094,695,708	85,074,740,433	12,732,808,867
ETH	-60.67%	23,115,908,213	45,935,436,014	10,808,516,023
XRP	-69.21%	2,602,610,355	4,478,970,676	1,035,598,862
LINK	-57.11%	1,970,828,865	3,284,799,269	1,408,923,114
ADA	-55.27%	610,836,563	972,288,549	432,056,042
CRO	+293.35%	42,302,543	92,136,666	14,559,092
LTC	-59.21%	733,265,063	1,178,328,487	480,633,037
UNI	-58.71%	253,972,788	408,314,848	163,977,275
BCH	-74.34%	492,298,178	1,085,077,944	275,165,006



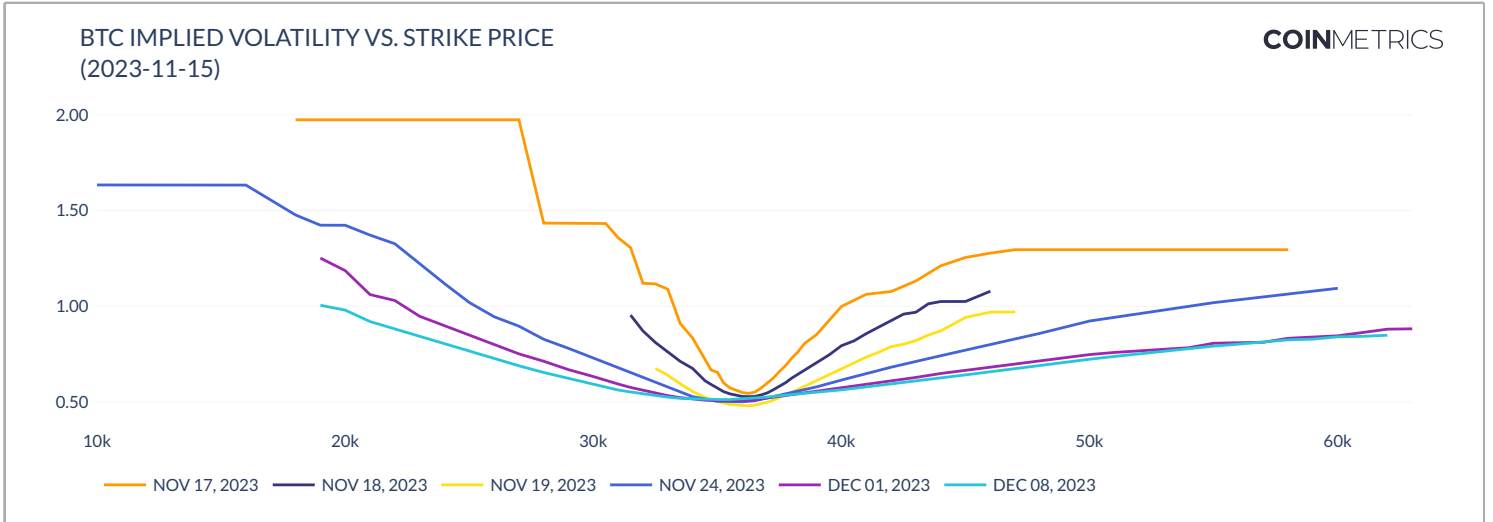
OPTIONS SNAPSHOT

BTC OPEN INTEREST

TOTAL	\$13,684,560,315
CALLS	\$9,431,776,405
PUTS	\$4,252,783,910

ETH OPEN INTEREST

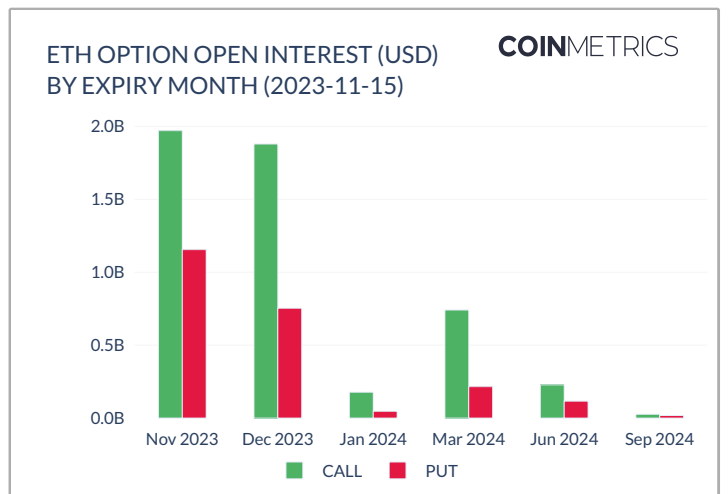
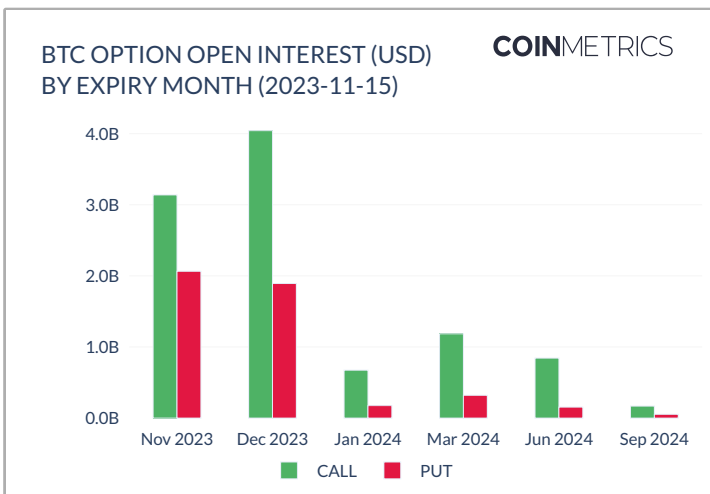
TOTAL	\$6,868,453,636
CALLS	\$4,733,558,211
PUTS	\$2,134,895,425



AT THE MONEY OPTIONS

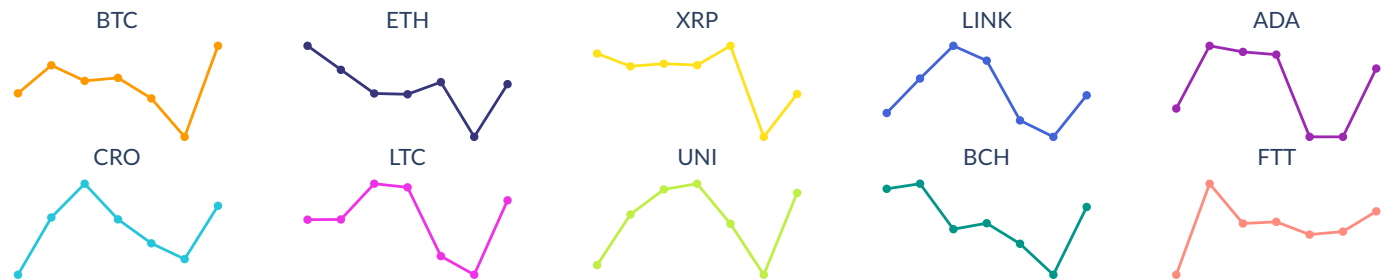
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

CALLS							PUTS							
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
6.39815	-116.71064	1.01763	0.78456	0.00027	1.092	0.0835	BTC-16NOV23-34750	0	1.092	0.00027	-0.21544	-0.29475	-116.71064	6.39815
3.89843	-26.00157	2.69585	0.9419	0.00009	1.027	0.0768	BTC-16NOV23-35000	0	1.027	0.00009	-0.05811	-0.17955	-26.0038	3.89876
8.96021	-158.82112	0.82113	0.57423	0.00032	1.0007	0.0701	BTC-16NOV23-35250	0.0001	1.0008	0.00032	-0.42577	-0.6436	-158.82112	8.96021
6.67677	-44.53243	2.54771	0.88093	0.00015	0.997	0.0638	BTC-16NOV23-35500	0.0002	0.9972	0.00015	-0.11908	-0.36879	-44.53527	6.6772
5.07285	-71.70065	1.52643	0.88226	0.00015	0.8095	0.0851	BTC-17NOV23-34750	0.0007	0.8094	0.00015	-0.11774	-0.21835	-71.70065	5.07285
34.16899	-31.06468	9.87296	0.50717	0.00012	0.7913	0.0785	BTC-17NOV23-35000	0.0009	0.7913	0.00012	-0.49286	-11.22234	-31.06446	34.16874
7.20958	-96.5606	1.39724	0.79935	0.00022	0.7517	0.0721	BTC-17NOV23-35250	0.001	0.7516	0.00022	-0.20065	-0.37264	-96.5606	7.20958
33.89779	-30.81812	8.79136	0.44945	0.00012	0.7221	0.0656	BTC-17NOV23-35500	0.0012	0.7221	0.00012	-0.55032	-12.59959	-30.82225	33.90234
9.98665	-71.95897	2.14348	0.76324	0.00022	0.7111	0.086	BTC-18NOV23-34750	0.0014	0.7112	0.00022	-0.23676	-0.71071	-71.95897	9.98665
11.18249	-80.1636	1.98503	0.70411	0.00025	0.6847	0.0796	BTC-18NOV23-35000	0.0016	0.6849	0.00025	-0.29575	-0.88925	-80.07918	11.1801



MARKET CAPITALIZATION

MARKET CAPITALIZATION, 7 DAY TREND



MARKET CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+3.21%	720,348,558,371	739,525,714,299	695,523,122,554
ETH	-2.63%	255,790,768,266	263,175,425,918	246,709,443,290
XRP	-2.58%	65,679,856,329	66,919,255,208	63,059,796,981
LINK	+3.16%	15,136,870,985	16,364,824,357	13,992,183,749
ADA	+3.24%	12,920,899,153	13,334,830,808	12,400,557,482
CRO	+23.34%	9,643,748,609	10,925,877,961	8,352,105,087
LTC	+1.25%	5,411,611,762	5,539,793,037	5,219,887,210
UNI	+5.37%	5,267,699,557	5,407,663,910	5,062,014,953
BCH	-0.68%	4,626,384,531	4,693,059,041	4,532,377,432
FTT	+69.23%	1,089,612,772	1,416,752,582	710,695,403

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+3.17%	506,281,956,232	519,591,965,629	488,803,156,493
ETH	-2.82%	225,205,762,746	231,802,181,157	217,153,722,350
XRP	-2.59%	31,131,860,093	31,719,024,718	29,888,799,873
LINK	+3.16%	8,252,330,895	8,922,028,605	7,628,270,111
ADA	+3.29%	11,537,434,588	11,904,457,712	11,073,636,785
CRO	+23.34%	914,781,440	1,036,413,797	792,273,116
LTC	+1.23%	4,576,632,380	4,685,628,893	4,414,018,562
UNI	+5.38%	1,362,984,091	1,399,205,081	1,309,790,455
BCH	-0.74%	3,117,220,011	3,163,080,881	3,053,050,021
FTT	+69.23%	1,089,612,772	1,416,752,582	710,695,403

REALIZED CAP

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

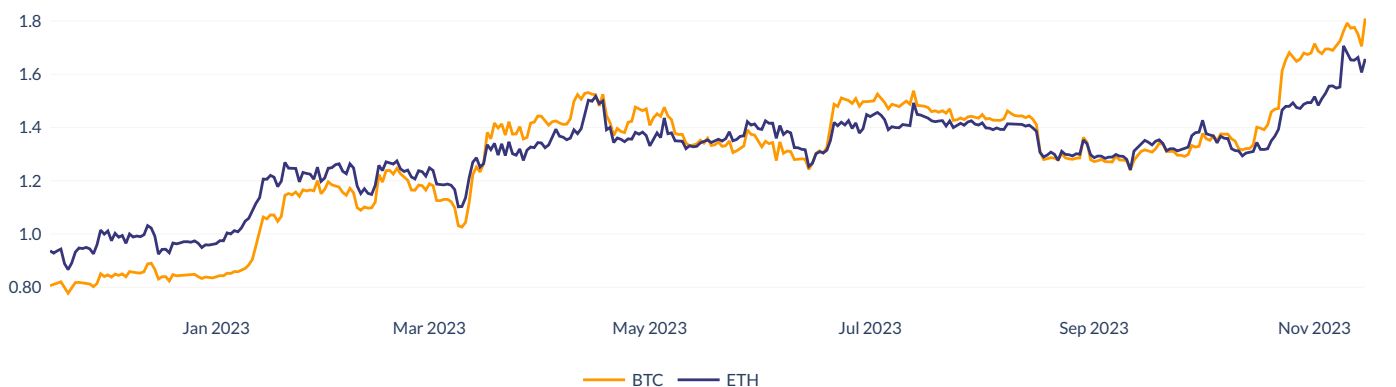
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+0.47%	407,570,244,788	408,543,227,690	406,622,901,817
ETH	+0.24%	154,065,562,389	154,549,351,211	153,495,330,832
XRP	+0.05%	53,756,635,599	53,841,050,030	53,686,757,263
LINK	+1.68%	9,384,539,383	9,454,119,469	9,273,984,473
ADA	+0.42%	15,741,589,227	15,762,895,921	15,690,222,683
CRO	+0.21%	20,872,164,822	20,889,828,571	20,843,745,896
LTC	+0.02%	6,738,168,793	6,741,422,311	6,734,650,248
UNI	+0.15%	7,864,331,738	7,870,577,644	7,853,675,077
BCH	-0.08%	4,736,095,880	4,738,149,210	4,732,045,711
FTT	+20.73%	755,702,911	779,093,602	643,962,213

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	+2.72%	1.77	1.81	1.71
ETH	-2.87%	1.66	1.71	1.61
XRP	-2.62%	1.22	1.24	1.17
LINK	+1.45%	1.61	1.73	1.49
ADA	+2.80%	0.82	0.85	0.79
CRO	+23.08%	0.46	0.52	0.40
LTC	+1.23%	0.80	0.82	0.78
UNI	+5.21%	0.67	0.69	0.64
BCH	-0.60%	0.98	0.99	0.96
FTT	+40.17%	1.43	1.82	1.10

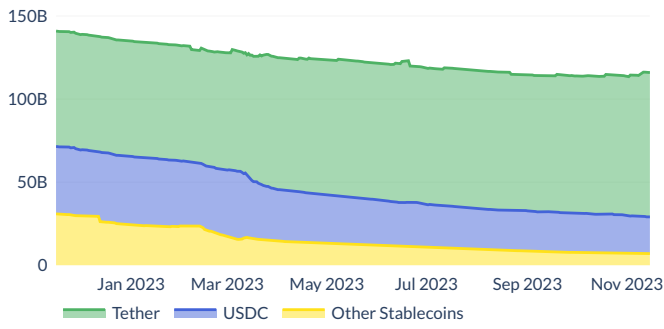
MARKET VALUE TO REALIZED VALUE 1Y (2023-11-15)



STABLECOINS REPORT

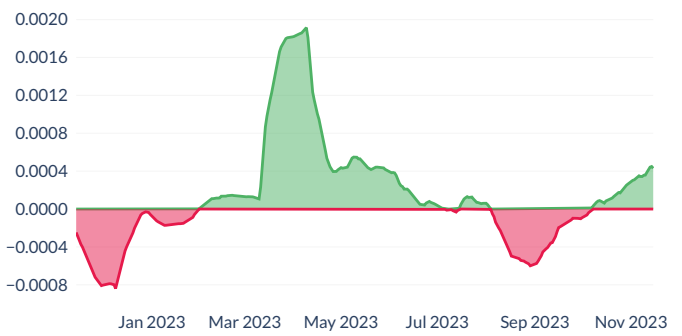
TOTAL STABLECOINS SUPPLY 1Y (2023-11-15)

COINMETRICS



TETHER PREMIUM/DISCOUNT TO USD 1Y (2023-11-15)

COINMETRICS



MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+0.05%	40,041,353,665	40,054,005,439	40,025,989,130
USDT_OMNI	+0.05%	888,415,302	888,694,815	888,073,205
USDT_TRX	+2.23%	46,709,199,517	46,866,808,991	45,833,944,937
PAX	-0.54%	461,912,368	469,647,618	452,508,607
DAI	-0.85%	3,702,203,026	3,730,266,781	3,674,159,351
USDC	-0.31%	22,125,111,607	22,253,844,180	21,885,651,948
BUSD	-2.08%	1,868,753,414	1,884,304,991	1,845,073,908
GUSD	-2.36%	156,362,523	157,867,926	154,135,084

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-26.24%	3,983,375,091	6,175,032,299	1,640,282,087
USDT_OMNI	-40.16%	519,160	1,669,151	6,334
USDT_TRX	-29.26%	10,921,620,264	16,168,157,445	5,068,772,745
PAX	-73.67%	21,019,025	51,010,592	3,281,604
DAI	-70.51%	4,503,809,129	11,598,898,893	1,358,060,562
USDC	-30.09%	4,140,727,857	6,116,104,550	1,523,150,592
BUSD	-97.14%	44,072,745	243,269,038	1,602,307
GUSD	+106.41%	2,930,061	7,109,934	236,364

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	-7.39%	120,831	138,249	95,729
USDT_OMNI	-6.25%	22	37	15
USDT_TRX	+1.56%	1,795,773	1,939,399	1,500,635
PAX	-9.64%	132	190	96
DAI	-6.39%	4,434	5,086	3,590
USDC	-14.82%	44,915	54,792	35,839
BUSD	-10.27%	408	466	321
GUSD	-26.53%	171	262	84

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

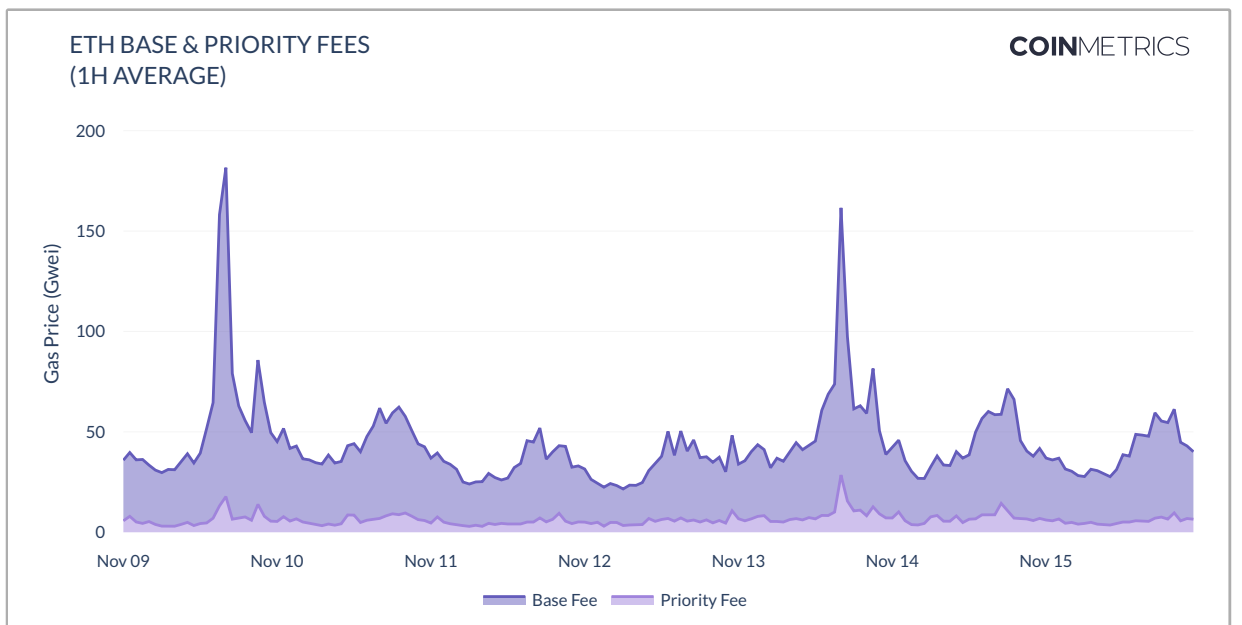
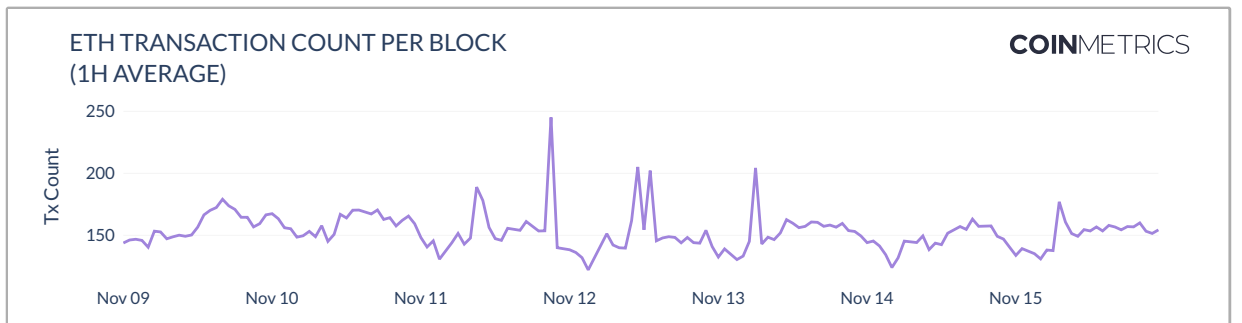
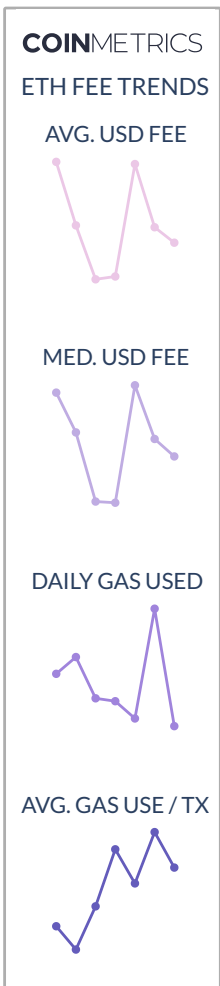
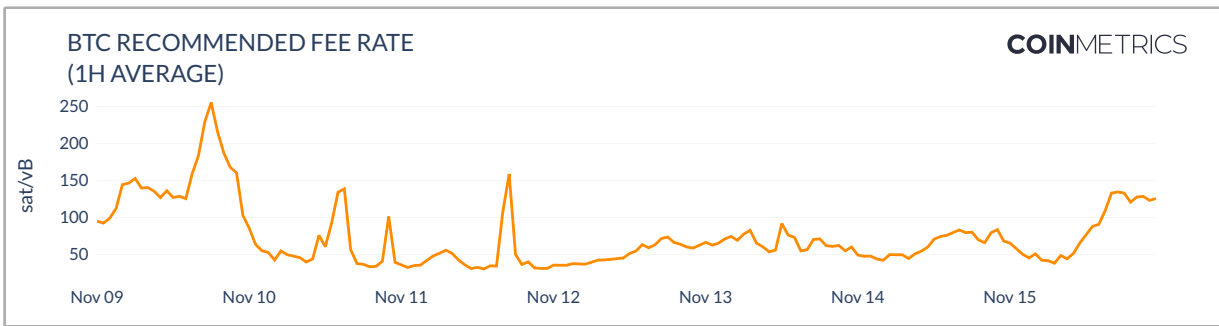
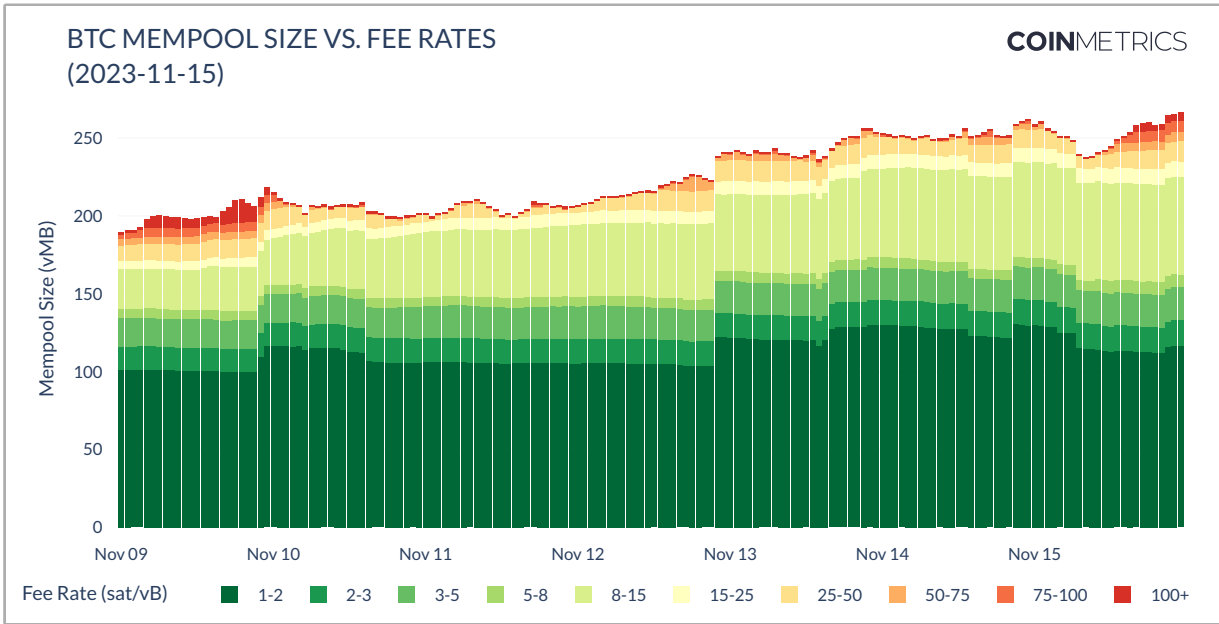
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.70%	816	951	524
USDT_OMNI	+59.78%	872	1,751	13
USDT_TRX	-4.71%	204	224	197
PAX	-66.51%	7,825	21,211	896
DAI	-58.23%	3,023	4,894	1,120
USDC	-25.70%	1,542	2,019	1,004
BUSD	-27.03%	429	701	187
GUSD	+123.39%	1,108	4,994	141

VELOCITY

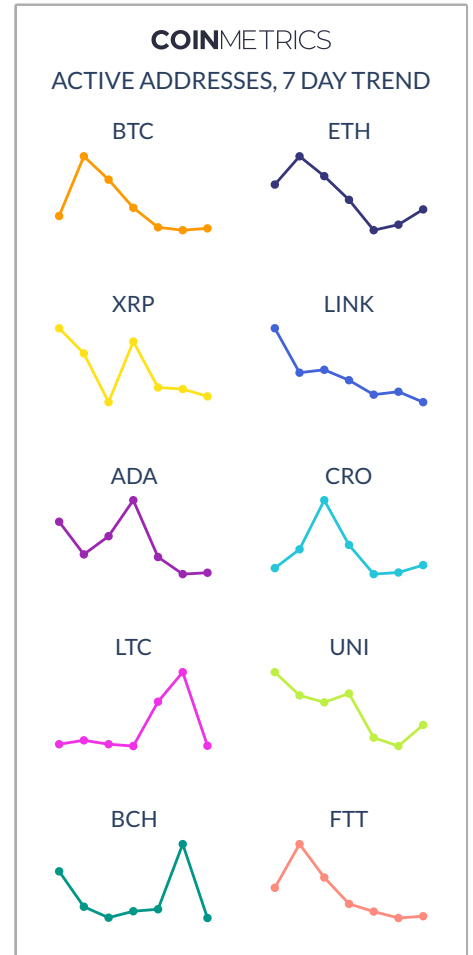
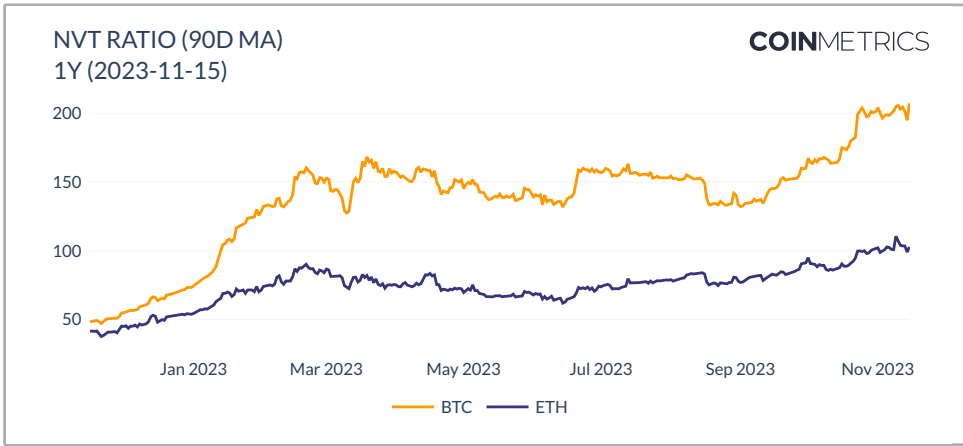
Number of times that an average native unit among the active supply has been transferred in the past 1 year

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.75%	37.12	37.38	36.98
USDT_OMNI	-14.71%	36.69	38.66	32.94
USDT_TRX	-2.10%	70.79	72.22	70.38
PAX	-0.95%	39.70	40.28	39.09
DAI	-0.35%	144.70	146.80	142.85
USDC	-2.23%	111.29	113.06	109.88
BUSD	-3.42%	70.42	72.17	69.71
GUSD	-4.47%	21.83	22.63	21.47

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	-2.88%	1,011,597	1,127,201	957,065
ETH	-7.18%	448,656	503,811	404,395
XRP	-15.28%	27,368	30,285	25,264
LINK	-51.62%	6,345	9,627	4,658
ADA	-22.96%	39,113	47,974	33,419
CRO	+6.70%	773	1,467	504
LTC	-5.83%	500,727	1,147,634	287,947
UNI	-20.22%	1,085	1,271	911
BCH	-82.78%	111,194	301,575	35,027
FTT	-66.46%	830	1,972	286

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-0.01%	13,733,652	13,736,073	13,731,088
ETH	-0.01%	109,558,076	109,579,692	109,538,368
XRP	-0.01%	47,393,770,283	47,395,769,122	47,391,580,559
LINK	+0.01%	545,180,386	545,195,500	545,152,252
ADA	+0.09%	30,889,917,185	30,899,740,476	30,873,315,516
CRO	-0.00%	9,485,744,793	9,485,909,329	9,485,567,768
LTC	+0.01%	62,469,486	62,474,218	62,465,033
UNI	+0.01%	258,743,631	258,749,545	258,726,922
BCH	-0.03%	13,177,355	13,180,054	13,173,797
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	-0.33%	563,592	706,503	418,873
ETH	-4.43%	1,093,462	1,146,191	1,050,000
XRP	-7.08%	1,036,180	1,137,991	911,120
LINK	-51.43%	9,080	13,913	6,758
ADA	-1.90%	58,083	65,613	51,940
CRO	+25.21%	1,073	2,159	637
LTC	-19.21%	374,787	1,005,331	155,559
UNI	-41.31%	1,435	1,796	1,054
BCH	-90.48%	110,243	302,966	17,662
FTT	-69.37%	1,848	4,355	445

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	-25.13%	4,692,609,469	6,848,112,931	2,643,835,607
ETH	-30.30%	4,252,960,809	6,176,391,220	2,677,465,069
XRP	-38.62%	765,311,499	1,243,961,354	550,773,529
LINK	-50.05%	266,264,374	400,020,405	181,074,518
ADA	-29.20%	6,971,065,629	8,625,098,247	5,795,498,546
CRO	-9.04%	5,048,267	10,094,427	2,437,912
LTC	-10.78%	93,914,202	113,886,155	70,694,615
UNI	-48.01%	23,895,674	34,329,324	16,912,363
BCH	-51.15%	38,017,862	62,185,533	20,213,761
FTT	-59.64%	29,564,053	76,046,703	12,495,371

ADDRESSES ≥ \$1

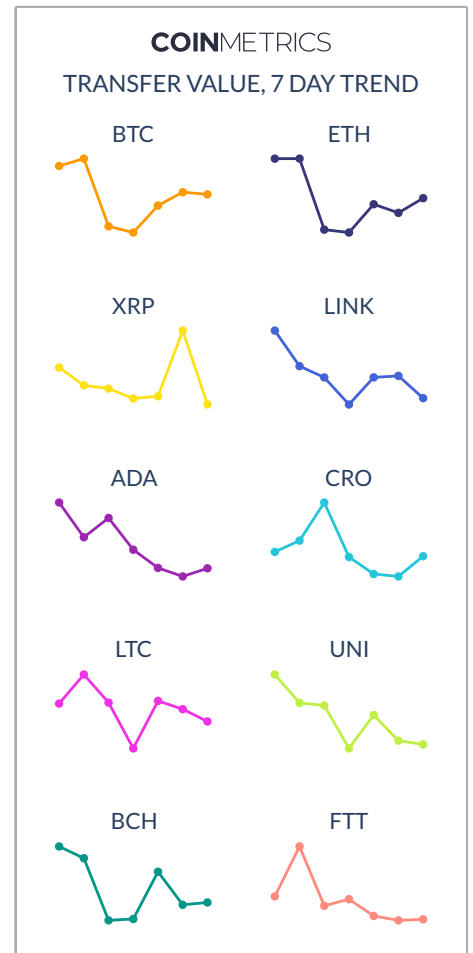
Count of addresses holding at least \$1 worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.14%	42,599,141	42,882,586	42,399,825
ETH	-0.48%	64,126,045	64,537,928	63,543,462
XRP	+0.19%	4,859,338	4,863,687	4,854,692
LINK	+0.65%	558,724	560,796	556,445
ADA	+0.36%	3,688,330	3,699,996	3,673,389
CRO	+1.58%	154,778	156,198	153,543
LTC	+0.47%	2,428,832	2,443,393	2,419,031
UNI	+0.23%	293,222	293,583	292,700
BCH	-0.21%	4,578,373	4,592,595	4,556,729
FTT	+3.96%	23,509	23,733	22,830

ADDRESSES ≥ \$1M

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
BTC	+1.07%	81,665	82,470	80,521
ETH	-2.24%	11,442	11,764	10,720
XRP	-1.16%	1,376	1,406	1,343
LINK	+1.08%	749	788	706
ADA	+0.90%	998	1,021	963
CRO	+30.56%	44	49	36
LTC	+1.93%	471	480	464
UNI	+3.40%	300	305	294
BCH	-1.95%	355	362	352
FTT	+21.74%	27	33	23



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
- **CMBISCOPE:** 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 11/12/2023 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 11/12/2023 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.