STATE OF THE MARKET

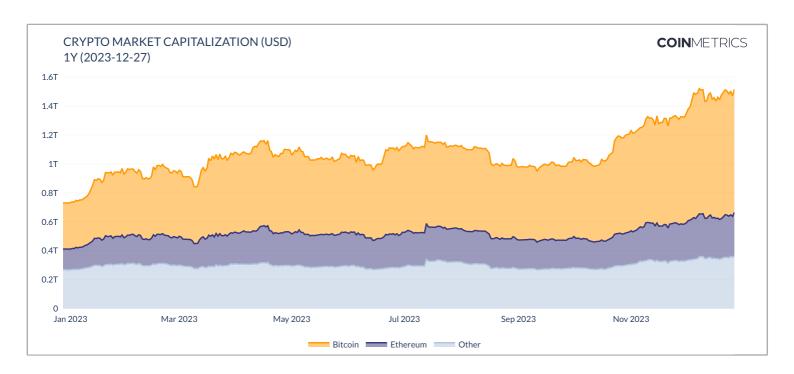
DEC. 21 - 27, 2023

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



MARKET SUMMARY

Though the crossroads of crypto compliance remain difficult to navigate, engaging with global regulators has yielded some success, with new use cases being green-lit worldwide. Under crypto-friendly President Javier Milei, Argentina's newly-elected government has "ratified and confirmed" that Bitcoin can be used to settle legally-binding contracts, a major step towards combatting hyperinflation via the broad adoption of cryptocurrency. In Nigeria, the central bank has reversed course on their ban against crypto transactions, first imposed in February 2021. Financial institutions will once again be allowed to open accounts for Virtual Asset Service Providers (VASPs), though these entities require licensing from Nigeria's SEC, and banks are still banned from directly holding/transacting with crypto. Bulgaria's investigation into crypto lender Nexo has concluded, "with no evidence of criminal activity" according to the country's prosecutor office. The regulator also noted Bulgaria "lacks a corresponding legal regime" for dealing with digital asset businesses, therefore the firm was "not subject to permit, registration or licensing regimes." In France, Coinbase has secured approval as a registered VASP, allowing the exchange to offer a range of services in the country, from custody to trading. The move comes ahead of the official enactment of the European Union's Market in Crypto Assets (MiCA) legislation in Dec. 2024, which will allow any registered VASP to offer services across the entire European bloc. In the U.S., Paxos received approval from the New York Department of Financial Services to expand services to the Solana blockchain. Though the stablecoin issuer was once limited to operating only on Ethereum, the nod from NYDFS allows Paxos to move ahead with plans to offer its USDP token to SOL users beginning January 2024. Late Wednesday, FINRA granted controversial U.S. exchange Prometheum permission to offer clearing & settlement services for digital asset securities. Earlier this year, Prometheum received rare approval for a special purpose broker dealer license from the SEC, spurring suspicion among industry trade groups (i.e. the Blockchain Association) towards the "sweetheart deal." As spot ETFs inch towards a decision deadline in the U.S., Hong Kong regulators beckon fund admins towards their jurisdiction. The Hong Kong Securities and Futures Commission has issued a joint statement with the city's Monetary Authority, authorizing the creation of spot cryptocurrency funds & bolstering the region's ambitions as an up-and-coming hub for digital assets. The international competition to attract crypto capital is heating up, promising to upend the existing balance of global financial power.

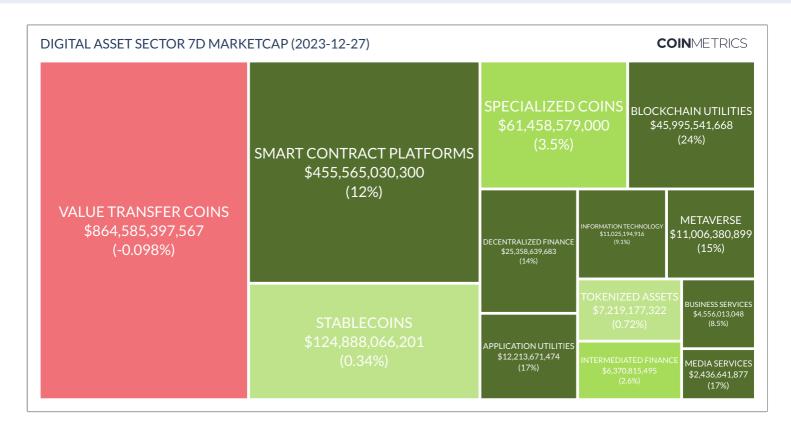


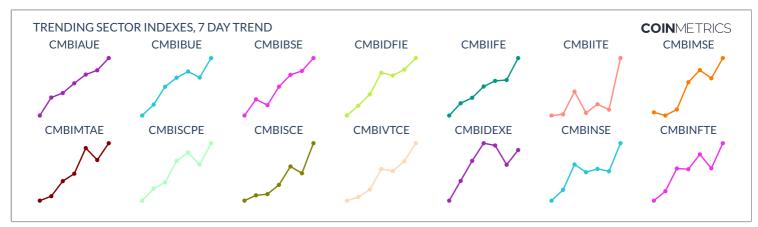
PRICE (CMBI CONSTITUENTS)

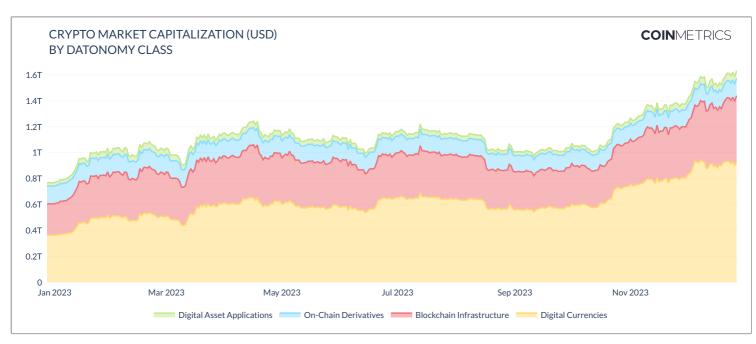
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$43,414.84	-0.66%	\$43,734.01	\$42,153.32	+161.71%	\$44,209.30	\$16,542.40
ETH	\$2,352.41	+5.63%	\$2,352.41	\$2,216.99	+96.83%	\$2,366.41	\$1,195.17
SOL	\$109.53	+17.87%	\$119.02	\$92.93	+1,211.60%	\$119.02	\$8.35
ADA	\$0.63	+2.54%	\$0.63	\$0.59	+162.16%	\$0.64	\$0.24
DOGE	\$0.09	-3.02%	\$0.10	\$0.09	+33.74%	\$0.10	\$0.06
TRX	\$0.11	+0.70%	\$0.11	\$0.10	+97.24%	\$0.11	\$0.05
MATIC	\$1.04	+29.87%	\$1.04	\$0.80	+34.47%	\$1.52	\$0.50
BNB	\$313.98	+15.87%	\$313.98	\$264.86	+27.92%	\$348.71	\$204.88
AVAX	\$43.13	-5.94%	\$48.42	\$43.13	+300.01%	\$48.42	\$8.82
LINK	\$16.34	+8.81%	\$16.34	\$14.93	+194.11%	\$16.81	\$5.09
CMBI10	\$4,507.68	+2.17%	\$4,507.68	\$4,343.27	+136.52%	\$4,507.68	\$1,904.46

ASSET CLASSES





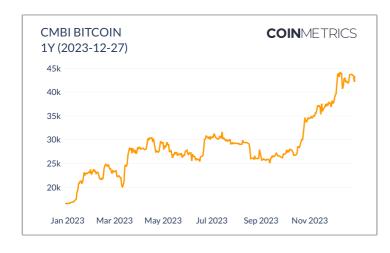


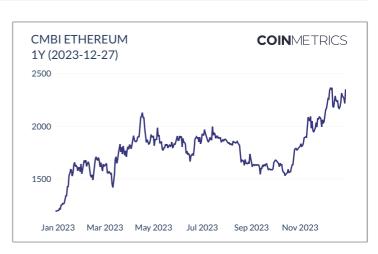
INDEX ROUNDUP

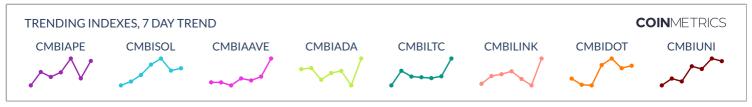
SINGLE ASSET INDEXES

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

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBIBTC	\$43,414.84	-0.66%	\$43,734.01	\$42,153.32	+161.71%	\$44,209.30	\$16,542.40
СМВІВТСТ	\$46,644.40	-0.66%	\$46,987.31	\$45,289.03	+161.71%	\$47,497.95	\$17,772.96
СМВІЕТН	\$2,352.41	+5.63%	\$2,352.41	\$2,216.99	+96.83%	\$2,366.41	\$1,195.17
СМВІЕТНТ	\$2,553.76	+5.63%	\$2,553.76	\$2,406.75	+96.83%	\$2,568.95	\$1,297.47





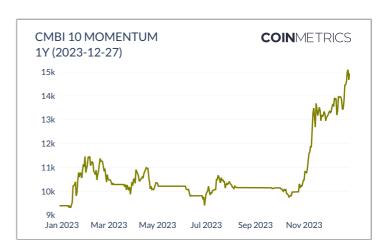


MULTI ASSET INDEXES

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	\$4,507.68	+2.17%	\$4,507.68	\$4,343.27	+136.52%	\$4,507.68	\$1,904.46
CMBI10E	\$8,633.41	+6.19%	\$8,633.41	\$8,130.49	+153.20%	\$8,633.41	\$3,409.70
CMBI10EX	\$9,715.46	+7.58%	\$9,715.46	\$9,030.61	+108.53%	\$9,715.46	\$4,659.07
CMBI10M	\$14,948.23	+3.44%	\$15,099.48	\$14,450.55	+59.09%	\$15,099.48	\$9,310.27
CMBIBE	\$21,105.12	+0.91%	\$21,133.10	\$20,334.20	+137.06%	\$21,410.88	\$8,888.82





MARKET MOVEMENT

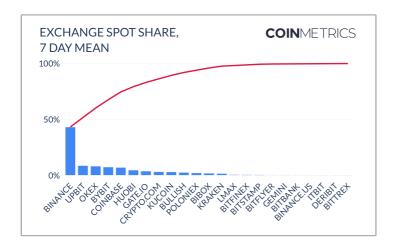
TRADING DIARY, 7 DAY

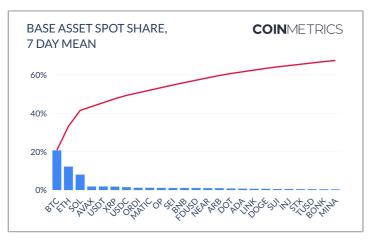
ADVANCING VOLUME \$198,161,927,064

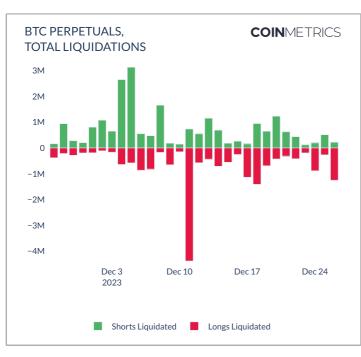
DECLINING VOLUME \$72,052,083,490

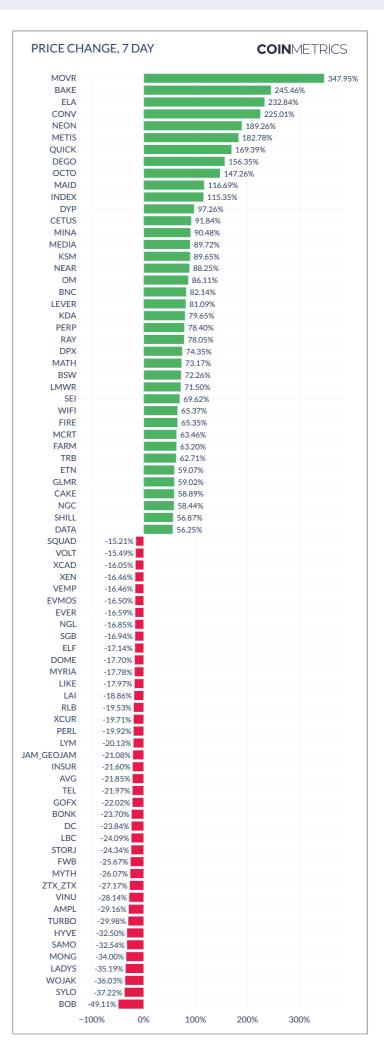
ADVANCES 636

DECLINES 216

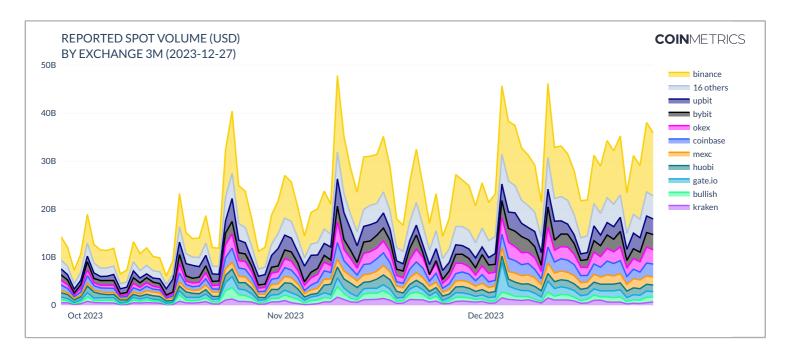


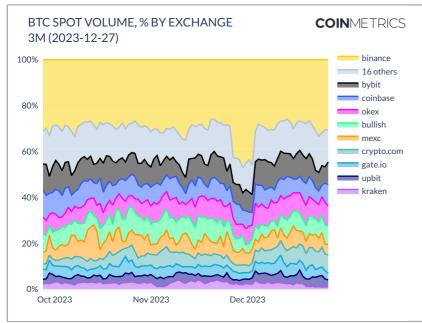






AGGREGATE VOLUME





BTC SPOT VOLUME LEADERS

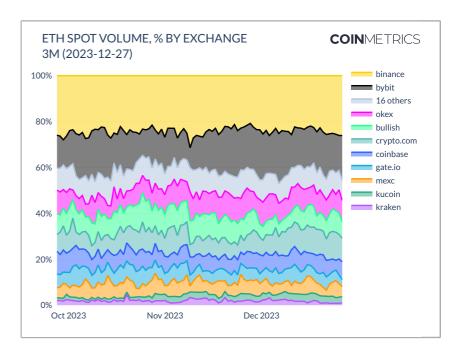
Top 10 exchanges by total BTC spot volume reported over past 3 months.

ASSET	90D CHANGE	90D AVERAGE	90D MAX	90D MIN
BINANCE	+105.64%	1,883,008,941	4,935,041,747	368,302,992
BYBIT	+46.55%	613,888,536	1,471,077,595	103,571,218
COINBASE	+71.86%	514,891,968	1,466,959,451	86,329,162
OKEX	+167.32%	495,426,434	1,484,994,638	66,187,142
BULLISH	+139.47%	480,683,865	1,639,377,390	50,887,961
MEXC	+66.18%	364,489,801	610,210,430	125,668,645
CRYPTO.COM	+499.68%	327,552,040	795,299,144	32,535,798
GATE.IO	+44.24%	274,014,912	1,185,199,996	34,817,795
UPBIT	+231.39%	196,880,160	691,230,794	37,417,272
KRAKEN	-23.42%	169,173,172	509,998,152	33,065,252

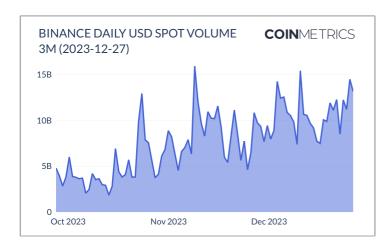
ETH SPOT VOLUME LEADERS

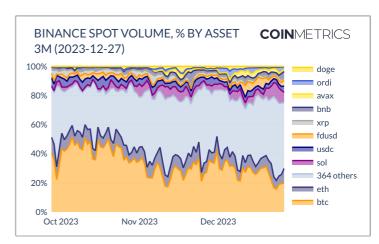
Top 10 exchanges by total ETH spot volume reported over past 3 months.

ASSET	90D	90D	90D MAX	90D MIN
AUSET	CHANGE	AVERAGE	705 11100	702 11111
BINANCE	+175.93%	825,403,441	2,735,354,995	184,763,402
BYBIT	+290.16%	568,749,226	1,276,933,941	110,543,432
OKEX	+157.54%	313,485,454	1,091,551,826	40,857,637
BULLISH	+171.58%	303,105,342	904,786,946	46,931,409
CRYPTO.COM	+191.58%	299,319,052	647,787,033	47,836,148
COINBASE	+146.93%	236,096,823	683,092,379	38,701,779
GATE.IO	+56.81%	189,391,376	516,733,775	41,311,639
MEXC	+158.52%	176,246,664	265,148,160	66,479,788
KUCOIN	+577.86%	81,988,093	207,952,652	8,177,843
KRAKEN	+45.74%	67,411,957	295,403,187	9,629,503

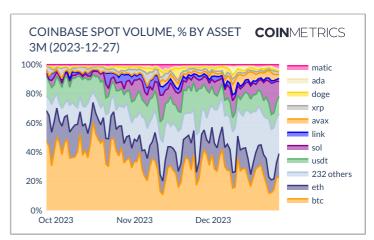


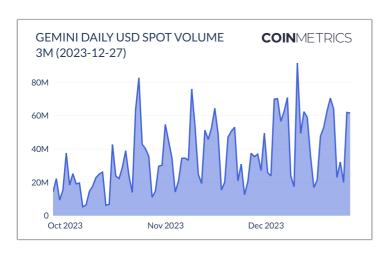
EXCHANGE SPOT VOLUME

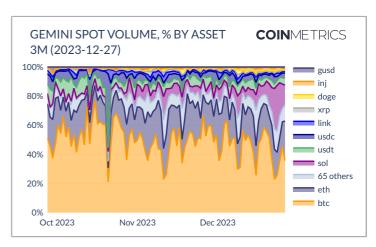


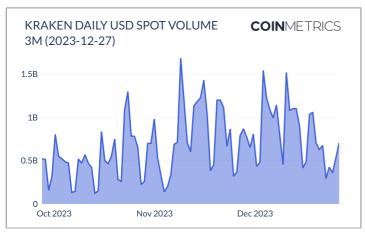


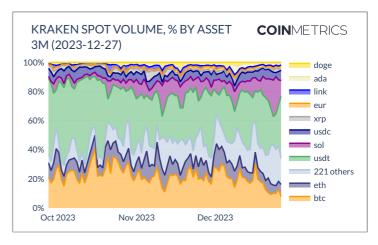




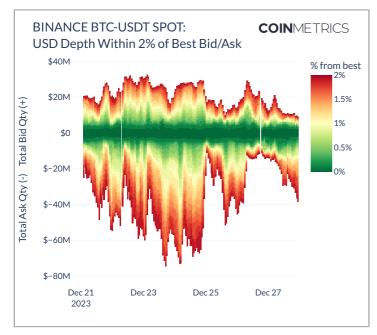


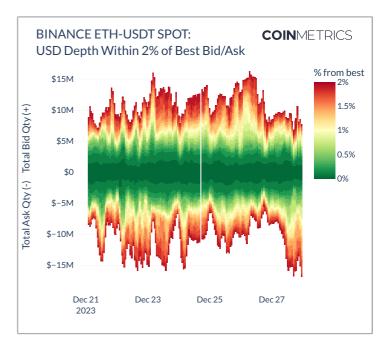


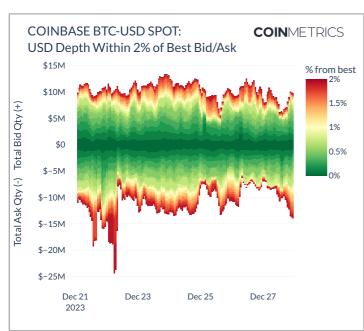


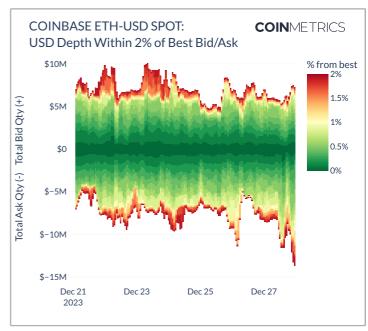


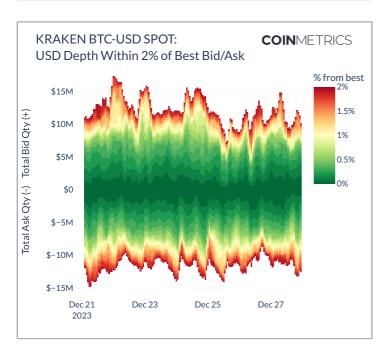
ORDER BOOK DEPTH

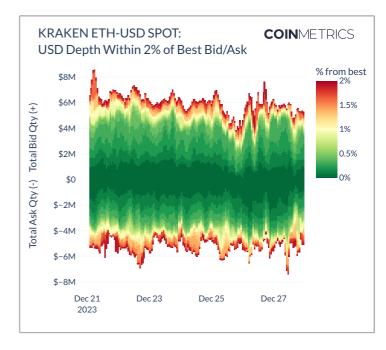




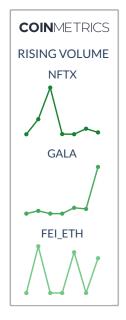


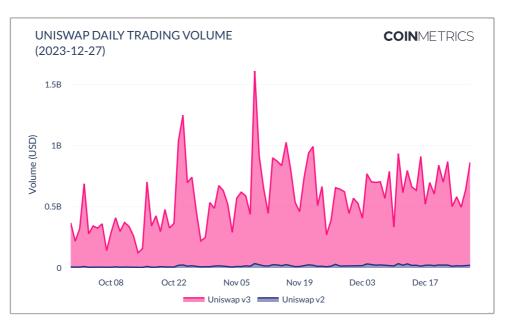




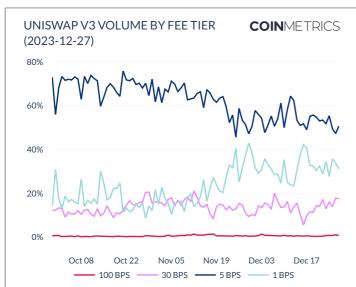


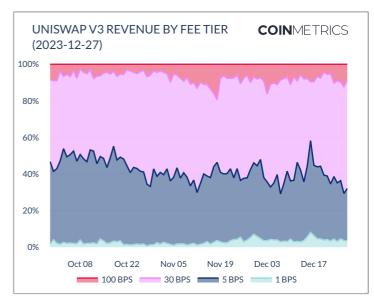
DEX DIGEST

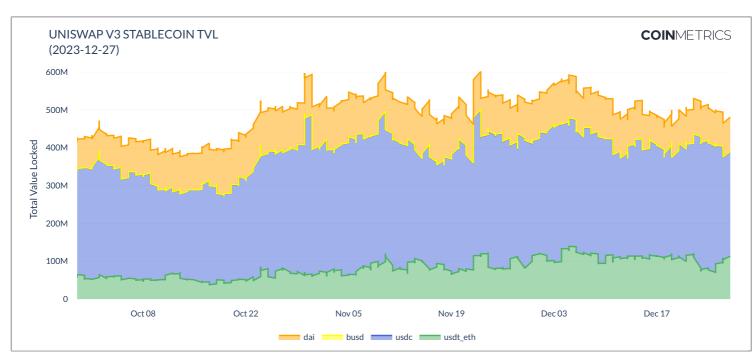












Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

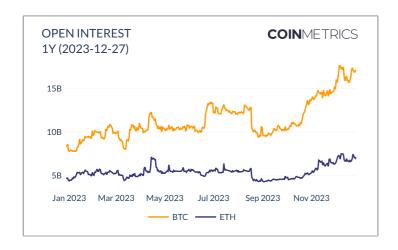
DEFI BALANCE SHEETS

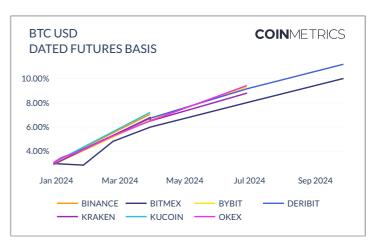


COMPOUND V2 BALANCE SHEET PROTOCOL HEALTH RATIOS 7D CHANGE VALUE **CURRENT RATIO** 0.741409 0.05% DEBT TO ASSETS RATIO 0.967715 -0.08% PROTOCOL UTILIZATION RATIO 0.291955 0.14% LIQUID SUPPLY RATIO 0 741409 0.05% ASSETS AND LIABILITIES VALUE 7D CHANGE ASSETS TOTAL USD \$1,583M -1.67% ASSETS TOTAL COUNT 19 0.0% LIABILITIES TOTAL USD \$1,532M -1.75% LIABILITIES TOTAL COUNT 0.0% LOANS LENT TOTAL USD \$447M -1.61% TVL TOTAL USD \$1,136M -1.7% NET WORKING CAPITAL USD -\$396M -1.9% **TOP 10 ASSETS** BY TOTAL VALUE LOCKED (USD) eth wbtc \$464.72M dai \$51.27M bat \$39.16M \$36.20M usdt_eth usdc \$32.12M uni \$15.52M link \$4.31M comp \$2.85M zrx \$2.44M 100M 200M 300M 400M 500M

PROTOCOL HI	EALTH RATIOS		VALUE	7D CHANGE
CURRENT RAT	10		0.697338	0.32%
DEBT TO ASSE	TS RATIO		1.000462	-0.0%
PROTOCOL U	TILIZATION RA	TIO	0.302202	-0.72%
LIQUID SUPPL	Y RATIO		0.697338	0.32%
ASSETS AND L	IABILITIES		VALUE	7D CHANGE
ASSETS TOTAL	USD		\$3,174M	-0.8%
ASSETS TOTAL	COUNT		52	0.0%
LIABILITIES TO	OTAL USD		\$3,175M	-0.81%
LIABILITIES TO	OTAL COUNT		52	0.0%
LOANS LENT T	OTAL USD		\$960M	-1.52%
TVL TOTAL US	D		\$2,214M	-0.49%
NET WORKING CAPITAL USD				
	0 0, 11 11, 12 002	,	-\$961M	-1.53%
TOP 10 / BY TOTA	ASSETS	LOCKED (U		-1.53% \$1013.74M
BY TOTA	ASSETS	LOCKED (U		
BY TOTA steth_lido wbtc weth	ASSETS AL VALUE	LOCKED (U \$426.04M	JSD)	
BY TOTA steth_lido wbtc weth link	ASSETS AL VALUE \$59.81M	LOCKED (U \$426.04M	JSD)	
BY TOTA steth_lido wbtc weth link usdt_eth	ASSETS AL VALUE \$59.81M \$30.78M	LOCKED (U \$426.04M	JSD)	
steth_lido wbtc weth link usdt_eth usdc	\$59.81M \$28.98M	LOCKED (U \$426.04M	JSD)	
BY TOTA steth_lido wbtc weth link usdt_eth	\$59.81M \$30.78M \$15.41M	LOCKED (U \$426.04M	JSD)	
BY TOTA steth_lido wbtc weth link usdt_eth usdc zrx	\$59.81M \$28.98M	LOCKED (U \$426.04M	JSD)	

FUTURES FEED





OPEN INTEREST

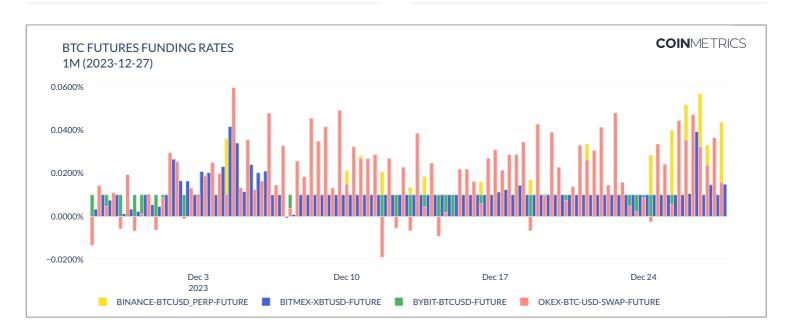
Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.07%	17,048,859,988	17,369,572,270	16,816,662,747
ETH	+2.72%	7,053,247,073	7,474,512,456	6,707,633,658
XRP	+12.36%	544,706,421	588,184,689	502,573,384
ADA	+10.31%	243,439,630	261,553,432	219,953,738
LINK	+16.27%	267,213,137	278,614,760	233,656,526
CRO	+5.22%	8,332,981	8,685,859	7,925,821
UNI	+27.73%	73,265,533	82,270,881	64,410,884
LTC	+4.40%	258,664,431	267,855,482	249,238,623
всн	+2.83%	141,117,631	147,231,671	137,641,386

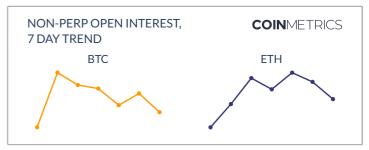
FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-13.30%	27,011,932,217	35,715,100,856	13,914,360,139
ETH	+18.73%	17,562,359,153	26,793,813,503	11,270,614,022
XRP	+57.27%	1,103,689,291	1,621,013,964	533,675,926
ADA	+4.68%	949,150,582	1,487,910,949	528,984,791
LINK	+34.55%	820,115,840	1,103,404,498	600,098,749
CRO	+58.86%	6,045,588	7,663,313	4,322,883
UNI	+102.36%	315,971,887	597,730,567	140,674,132
LTC	+127.96%	480,710,550	821,327,582	263,897,285
всн	+602.05%	348,501,224	1,053,394,964	150,044,710







OPTIONS SNAPSHOT

BTC OPEN INTEREST

ETH OPEN INTEREST

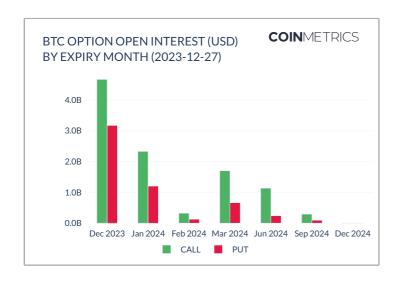
TOTAL	\$15,243,005,183	TOTAL	\$7,726,378,565
CALLS	\$9,971,430,358	CALLS	\$5,528,147,741
PUTS	\$5,271,574,825	PUTS	\$2,198,230,825

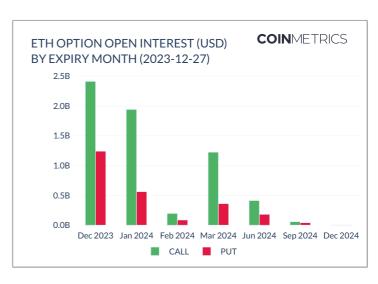


AT THE MONEY OPTIONS

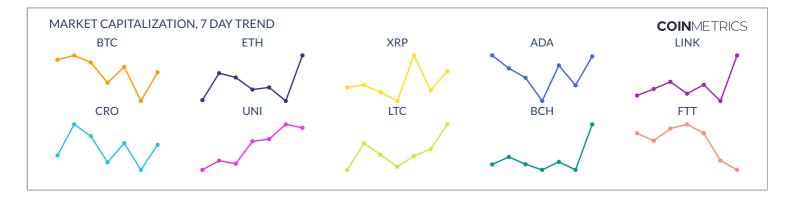
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

		(CALLS								PUTS	S		
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
7.5957	-50.7879	2.99475	0.88557	0.00012	0.7089	0.0459	BTC-28DEC23-41500	0.0001	0.7089	0.00012	-0.11443	-0.41463	-50.7879	7.5957
9.14099	-61.12033	2.88715	0.85038	0.00015	0.687	0.0402	BTC-28DEC23-41750	0.0002	0.687	0.00015	-0.14962	-0.54276	-61.12033	9.14099
10.66221	-70.99106	2.75988	0.80984	0.00017	0.6344	0.0345	BTC-28DEC23-42000	0.0003	0.6345	0.00017	-0.19012	-0.69044	-70.97307	10.66091
12.13956	-80.72252	2.60722	0.76246	0.0002	0.5639	0.0289	BTC-28DEC23-42250	0.0003	0.5639	0.0002	-0.2376	-0.86399	-80.75118	12.14114
34.43569	-38.7591	16.40066	0.73545	0.00007	0.5888	0.0486	BTC-29DEC23-41500	0.0014	0.5888	0.00007	-0.26455	-7.09548	-38.7591	34.43569
52.24869	-24.95268	16.35639	0.30192	0.00004	0.5476	0.038	BTC-29DEC23-42000	0.0022	0.5476	0.00004	-0.69808	-59.36907	-24.95268	52.24869
12.01922	-80.18382	2.54733	0.75877	0.0002	0.5421	0.0505	BTC-30DEC23-41500	0.0027	0.542	0.0002	-0.24124	-0.86128	-80.18481	12.01937
13.31839	-88.85099	2.37162	0.70425	0.00022	0.5291	0.0453	BTC-30DEC23-41750	0.0034	0.5291	0.00022	-0.29575	-1.05753	-88.85181	13.31852
14.35314	-95.75407	2.17833	0.64505	0.00024	0.5189	0.0404	BTC-30DEC23-42000	0.0042	0.5188	0.00024	-0.35495	-1.27133	-95.75407	14.35314
15.05132	-100.41184	1.97207	0.58249	0.00025	0.5111	0.0357	BTC-30DEC23-42250	0.0052	0.5111	0.00025	-0.41751	-1.49812	-100.41184	15.05132





MARKET CAPITALIZATION



MARKET CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.96%	851,151,463,999	861,608,364,730	832,043,610,689
ETH	+6.59%	289,246,521,041	300,912,980,142	281,965,295,095
XRP	+1.81%	62,625,184,647	64,606,829,936	61,362,587,749
ADA	-0.14%	21,471,218,364	22,016,757,595	20,588,617,928
LINK	+9.04%	15,588,137,473	16,635,844,705	15,070,421,827
CRO	+1.29%	9,982,720,484	10,268,340,783	9,719,023,301
UNI	+17.45%	6,771,141,470	7,342,060,637	6,177,688,841
LTC	+6.83%	5,384,926,020	5,602,660,360	5,244,356,932
ВСН	+12.69%	4,648,339,223	5,146,387,609	4,488,095,186
FTT	-7.48%	1,180,422,276	1,222,338,197	1,111,006,519

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.74%	583,522,784,923	590,314,332,796	570,506,185,810
ETH	+6.53%	246,697,243,375	256,298,601,534	240,400,693,591
XRP	+1.99%	29,938,115,493	30,874,842,367	29,324,728,431
ADA	-0.19%	19,148,047,923	19,642,132,888	18,357,199,131
LINK	+9.04%	8,680,755,974	9,264,177,932	8,392,434,349
CRO	+1.29%	991,412,215	1,019,792,745	965,205,975
UNI	+17.46%	1,889,818,519	2,049,205,611	1,724,117,461
LTC	+6.89%	4,177,174,168	4,346,301,863	4,066,081,690
ВСН	+14.02%	2,953,703,399	3,302,974,528	2,846,022,301
FTT	-7.48%	1,180,422,276	1,222,338,197	1,111,006,519

REALIZED CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.84%	426,488,844,557	428,612,374,880	425,049,790,606
ETH	+1.83%	162,810,214,778	164,119,383,947	161,172,943,465
XRP	+0.27%	54,259,787,997	54,361,445,774	54,168,652,630
ADA	+1.08%	17,318,085,350	17,467,594,259	17,257,107,767
LINK	+2.02%	10,198,337,581	10,344,314,386	10,139,630,232
CRO	+0.01%	20,923,893,493	20,924,755,763	20,923,035,544
UNI	+0.80%	8,593,593,357	8,627,618,292	8,557,779,336
LTC	+0.12%	6,667,259,244	6,671,954,076	6,663,720,367
ВСН	+0.62%	4,744,268,626	4,768,390,524	4,739,151,991
FTT	-0.48%	752,365,897	753,993,709	750,173,781

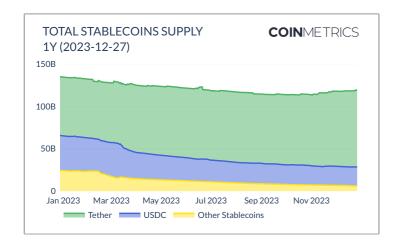
MARKET VALUE TO REALIZED VALUE

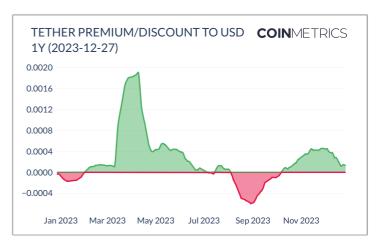
The ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-1.78%	2.00	2.02	1.95
ETH	+4.68%	1.78	1.83	1.73
XRP	+1.53%	1.15	1.19	1.13
ADA	-1.21%	1.24	1.27	1.19
LINK	+6.89%	1.53	1.61	1.48
CRO	+1.29%	0.48	0.49	0.46
UNI	+16.52%	0.79	0.85	0.72
LTC	+6.70%	0.81	0.84	0.79
ВСН	+12.00%	0.98	1.08	0.95
FTT	-7.03%	1.57	1.62	1.48



STABLECOINS REPORT





MARKET CAPITALIZATION

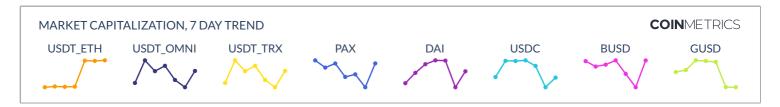
USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+2.48%	41,456,301,671	42,032,160,548	41,016,216,890
USDT_OMNI	+0.04%	888,428,138	888,807,310	888,063,090
USDT_TRX	+0.04%	48,851,729,280	48,872,578,667	48,831,656,453
PAX	-0.15%	367,019,922	368,799,171	364,075,316
DAI	+0.32%	3,735,044,644	3,746,091,593	3,719,192,946
USDC	-0.03%	22,515,846,309	22,642,334,956	22,289,919,936
BUSD	+0.01%	1,010,517,870	1,011,509,480	1,007,902,201
GUSD	-1.46%	39,803,411	40,226,636	39,197,477

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+9.45%	3,609,988,354	4,528,753,693	2,293,378,015
USDT_OMNI	+737.86%	79,878	254,006	465
USDT_TRX	+5.40%	9,959,183,381	14,677,776,838	5,372,062,514
PAX	-66.36%	5,180,214	21,334,140	626,383
DAI	+11.06%	2,175,820,865	3,278,707,992	1,825,910,580
USDC	+4.41%	3,216,400,966	4,494,437,696	1,577,638,213
BUSD	+21.57%	50,628,757	341,230,667	534,558
GUSD	+95.23%	1,270,161	2,899,767	154,234





TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+1.53%	120,942	138,361	105,073
USDT_OMNI	+183.33%	23	44	3
USDT_TRX	-1.13%	1,720,740	1,832,469	1,502,545
PAX	+22.88%	123	188	83
DAI	+20.60%	4,068	4,818	3,473
USDC	-4.79%	51,910	59,289	47,619
BUSD	-60.45%	515	1,192	278
GUSD	-87.23%	230	799	47

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

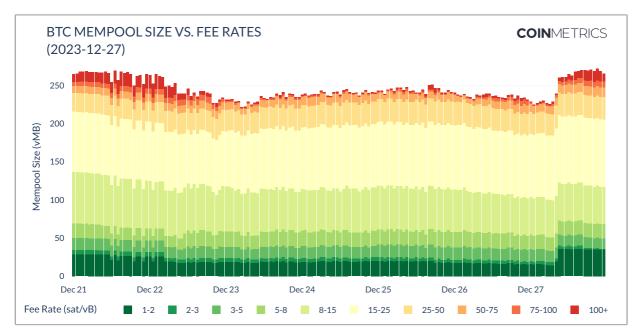
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-5.15%	753	953	577
USDT_OMNI	+316.82%	571	1,252	133
USDT_TRX	+1.65%	259	288	212
PAX	+34.24%	2,214	8,018	170
DAI	+4.48%	2,265	3,468	1,365
USDC	+26.44%	1,052	1,425	837
BUSD	+1,008.02%	322	882	36
GUSD	+11,868.14%	1,478	7,743	52

VELOCITY

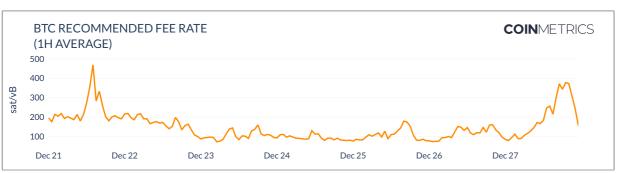
Number of times that an average native unit among the active supply has been transferred in the past 1 year

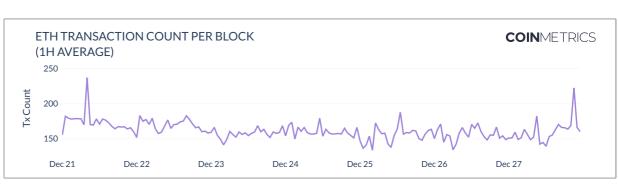
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-2.35%	36.22	36.67	35.60
USDT_OMNI	-0.95%	9.45	9.51	9.39
USDT_TRX	+0.68%	80.52	80.88	80.33
PAX	-0.73%	48.94	49.15	48.79
DAI	+3.20%	153.69	156.64	151.56
USDC	-0.80%	93.70	94.55	93.04
BUSD	-2.35%	101.10	102.52	100.11
GUSD	+2.00%	84.24	85.86	83.30

FEE MARKET



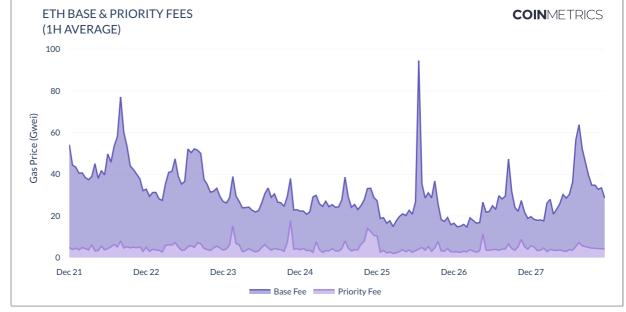








COINMETRICS



NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-4.83%	831,874	1,012,121	702,609
ETH	-10.97%	530,948	567,354	505,095
XRP	+60.28%	36,910	56,120	26,712
ADA	+15.09%	47,355	60,356	37,812
LINK	+5.25%	4,208	4,535	3,722
CRO	+0.49%	452	503	411
UNI	+86.70%	1,298	1,783	955
LTC	-53.09%	905,232	1,204,255	555,968
всн	+37.49%	45,792	79,196	29,280
FTT	+0.00%	184	204	157

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.25%	13,423,268	13,446,140	13,412,047
ETH	+0.22%	107,757,633	107,829,916	107,511,647
XRP	+0.18%	47,799,370,195	47,871,821,986	47,783,101,694
ADA	-0.01%	30,918,866,795	30,925,977,709	30,911,352,710
LINK	-0.00%	556,882,205	556,887,257	556,880,525
CRO	-0.00%	9,931,282,012	9,931,479,121	9,931,097,615
UNI	+0.01%	279,098,519	279,105,374	279,087,779
LTC	+0.09%	57,415,433	57,432,105	57,377,341
ВСН	+1.21%	12,448,647	12,577,589	12,426,395
FTT	+0.00%	328,895,104	328,895,104	328,895,104

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

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-8.05%	596,785	724,746	531,891
ETH	-8.40%	1,152,412	1,242,003	1,102,694
XRP	+83.58%	2,018,804	4,286,314	1,147,416
ADA	+7.35%	86,077	105,768	72,968
LINK	+11.27%	5,653	6,425	4,480
CRO	+3.49%	498	576	449
UNI	+128.10%	1,875	2,724	1,064
LTC	-59.13%	758,871	1,042,445	419,519
ВСН	+1.61%	40,779	76,589	31,991
FTT	+0.90%	230	267	203

TRANSFER VALUE, ADJUSTED

 ${\sf USD\ value\ of\ the\ sum\ native\ units\ transferred\ removing\ noise}$

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+52.97%	5,882,587,522	9,291,927,607	3,794,233,539
ETH	+10.20%	4,343,519,225	6,855,421,387	2,759,992,739
XRP	+11.94%	876,486,998	1,668,293,519	343,978,245
ADA	+13.91%	16,061,045,309	19,354,865,149	13,897,986,500
LINK	+45.12%	176,001,999	258,679,111	111,373,265
CRO	+191.84%	2,035,936	4,082,964	683,844
UNI	+219.64%	37,997,886	83,208,651	13,278,362
LTC	+3.02%	91,241,988	109,083,214	72,453,798
всн	+379.87%	36,456,438	117,326,129	17,718,078
FTT	-17.14%	3,276,443	5,958,402	1,287,044

ADDRESSES ≥ \$1

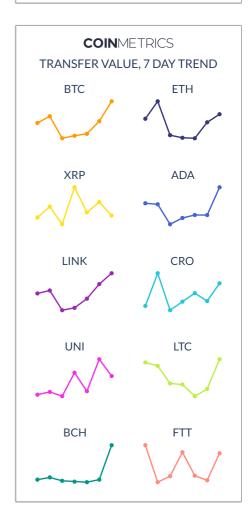
Count of addresses holding at least \$1 worth of native units

7D CHANGE	7D AVERAGE	7D MAX	7D MIN
+0.32%	45,257,587	45,377,428	45,202,117
+1.73%	67,591,528	68,322,414	67,162,535
+0.85%	4,948,307	4,974,012	4,932,139
+0.03%	3,907,704	3,920,060	3,886,841
+0.61%	574,427	576,859	573,387
+0.69%	155,902	156,449	155,222
+0.75%	298,777	300,020	297,421
+1.88%	2,446,050	2,468,121	2,422,628
+2.71%	4,590,491	4,692,124	4,558,958
-0.08%	24,118	24,141	24,094
	+0.32% +1.73% +0.85% +0.03% +0.61% +0.69% +0.75% +1.88% +2.71%	+0.32% 45.257.587 +1.73% 67.591,528 +0.85% 4,948,307 +0.03% 3,907,704 +0.61% 574,427 +0.69% 155,902 +0.75% 298,777 +1.88% 2,446,050 +2.71% 4,590,491	+0.32% 45,257,587 45,377,428 +1.73% 67,591,528 68,322,414 +0.85% 4,948,307 4,974,012 +0.03% 3,907,704 3,920,060 +0.61% 574,427 576,859 +0.69% 155,902 156,449 +0.75% 298,777 300,020 +1.88% 2,446,050 2,468,121 +2.71% 4,590,491 4,692,124

ADDRESSES ≥ \$1M

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.57%	90,128	90,635	89,183
ETH	+4.71%	12,384	12,730	12,157
XRP	+1.65%	1,339	1,365	1,319
ADA	+0.62%	1,593	1,627	1,551
LINK	+8.98%	731	777	713
CRO	-9.52%	41	43	38
UNI	+5.47%	338	349	329
LTC	+4.07%	474	486	467
ВСН	+16.90%	362	415	349
FTT	-7.41%	26	27	24



DATA EXPLAINER (P.1)

ESTIMATED MARKET CAPITALIZATION (MARKET CAP)

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

PRICE

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

DIGITAL ASSET TAXONOMY

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

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

Sector describes specialization of an asset within a class.

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

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

SECTOR INDEXES

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

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

CMBI SINGLE ASSET SERIES

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

CMBI BITCOIN

Daily level for Coin Metrics Bletchley Index (CMBI) Bitcoin for the previous month. CMBI Bitcoin tracks the price and performance of Bitcoin by sourcing BTC/USD market prices from numerous global liquidity venues. As of 12/24/2023 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 12/24/2023 constituent markets in the CMBI Ethereum were Binance.US, Bitstamp, Bittrex, Coinbase, Gemini, itBit and Kraken. More information on Coin Metrics Indexes.

CMBI MULTI ASSET SERIES

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

CMBI 10

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

CMBI 10 MOMENTUM

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

DATA EXPLAINER (P.2)

TRADING DIARY

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

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

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

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

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

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

EXCHANGE SPOT VOLUME MARKET SHARE

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

BASE ASSET SPOT VOLUME MARKET SHARE

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

LIQUIDATIONS

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

% PRICE CHANGE

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

REPORTED EXCHANGE VOLUME

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

SPOT VOLUME SHARE, % BY ASSET

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

ORDER BOOK DEPTH

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

DEX REPORTED SPOT VOLUME

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

DEX RISING VOLUME

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

DEX FALLING VOLUME

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

DATA EXPLAINER (P.3)

DEX VOLUME BY FEE TIER

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

DEX TOTAL VALUE LOCKED (TVL)

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

FUTURES OPEN INTEREST

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

FUTURES BASIS

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

FUTURES VOLUME

The reported futures volume from the markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset. Covered markets can be found in the Coin Metrics 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 a an expiry date, so one can hold the position for as long as desired.

OPTIONS OPEN INTEREST

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

OPTIONS IMPLIED VOLATILITY VS. STRIKE PRICE (VOLATILITY SMILE)

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

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

OPTIONS GREEKS

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

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

DATA EXPLAINER (P.4)

MARKET CAPITALIZATION (MARKET CAP)

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

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

FREE FLOAT MARKET CAP

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

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

REALIZED CAP

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

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

MARKET TO REALIZED VALUE (MVRV)

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

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

TOTAL STABLECOIN SUPPLY

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

TETHER PREMIUM/DISCOUNT TO USD

30-day moving average of Tether's price YTD premium or discount to USD. Price represents Coin Metrics' Reference Rate, which is calculated using an independent methodology robust to manipulation. 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 ≥ \$1

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

ADDRESSES WITH ≥ \$1M

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

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