STATE OF THE MARKET

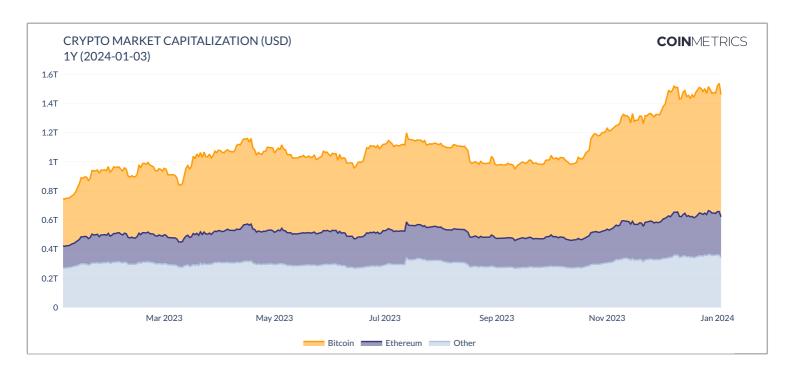
DEC. 28 - JAN. 3, 2024

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



MARKET SUMMARY

With Bitcoin's 15th birthday in the books, investors are ready to blow out some green candles. BTC briefly occupied the \$45K price level earlier this week, though the asset recently retreated to more comfortable territory near \$43,000. The SEC is rumored to approve a basket of Bitcoin spot ETFs by week's end, with Bloomberg's fund wonks holding firm to estimated success odds of 90%. The latest harbinger of the agency's looming ETF approval is the appointment of numerous Authorized Participants (APs). Goldman Sachs is reportedly in talks to help create and redeem spot ETF shares for BlackRock & Grayscale, joining JP Morgan, Jane Street, & Cantor Fitzgerald on the list of notable AP names. Still, some analysts expect the SEC will defy ETF optimists, with Matrixport's Markus Thielen predicting the SEC will reject all pending applications. Thielen points to the continued presence of "fraud and bad actors," underscoring the political disdain for crypto's lack of compliance in the domain of anti-money laundering & securities laws. In any case, inflows to crypto-linked investment products surged in 2023, up 3x compared to 2022, according to a CoinShares report. Bitcoin made up the lion's share of the \$2.2B inflow, with ProShares' BITO bitcoin futures ETF attracting \$500+ million in capital. With major institutions seeking crypto custody providers, Coinbase is reshuffling its executive leadership. The exchange's former Head of Custody Aaron Schnarch has exited the business, replaced by Rick Schonberg, an ex-Goldman & State Street Managing Director. Coinbase stock (COIN) has risen steadily alongside MicroStrategy (MSTR), though both have retraced from last week's highs. Microstrategy's Michael Saylor has cashed in on the rally, with plans to liquidate \$216M in MSTR stock to shore up his personal stack of BTC. Exchanges are revisiting listing policies, particularly with respect to privacy coins. OKX is winding down support for Monero (XMR), Zcash (ZEC), and Dash (DASH), citing a failure to meet "listing criteria" and other "feedback from users." Though the coins only amounted to a few million in USD trading volume, the delisting extends a politicallydriven degradation of infrastructure for blockchains offering user anonymity. Looking forward, Ethereum leadership is mapping out a busy roadmap of network upgrades. On Saturday, protocol co-founder Vitalik Buterin shared his vision for the blockchain's future in 2024, with single-slot finality and rollup scaling highly ranked in the prioritization queue. Though developers maintain ambitious plans for the technological evolution of the crypto industry, compliance demands & bull market mania threaten to derail the current cadence of protocol layer progress.

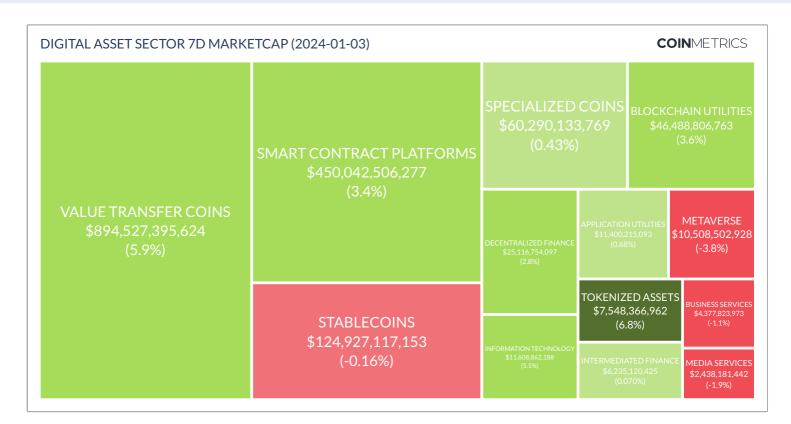


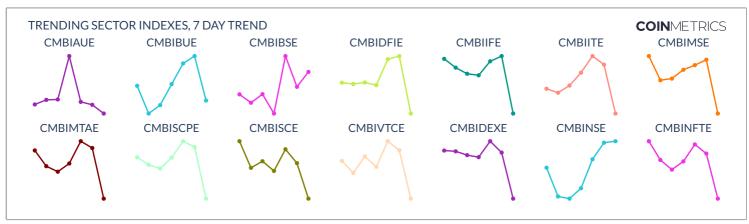
PRICE (CMBI CONSTITUENTS)

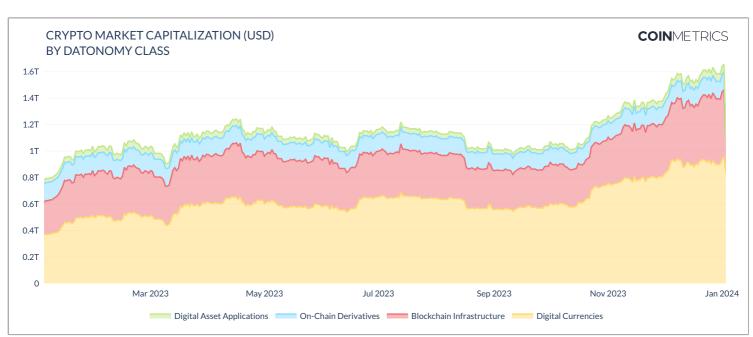
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

	,				3 1, ,		
ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$42,742.44	+0.57%	\$44,921.23	\$42,004.05	+153.64%	\$44,921.23	\$16,851.58
ETH	\$2,218.66	-5.71%	\$2,366.77	\$2,218.66	+77.07%	\$2,366.77	\$1,253.01
SOL	\$99.14	-0.71%	\$108.36	\$99.14	+623.52%	\$119.02	\$13.19
ADA	\$0.56	-9.64%	\$0.62	\$0.56	+107.59%	\$0.64	\$0.24
DOGE	\$0.08	-10.34%	\$0.09	\$0.08	+13.26%	\$0.10	\$0.06
TRX	\$0.11	+0.12%	\$0.11	\$0.11	+95.58%	\$0.11	\$0.05
MATIC	\$0.86	-14.04%	\$1.01	\$0.86	+8.01%	\$1.52	\$0.50
BNB	\$316.11	-2.81%	\$325.23	\$310.79	+22.67%	\$348.71	\$204.88
AVAX	\$36.92	-7.01%	\$41.23	\$36.92	+212.51%	\$48.42	\$8.82
LINK	\$14.18	-13.69%	\$16.43	\$14.18	+147.03%	\$16.81	\$5.09
CMBI10	\$4,356.14	-1.62%	\$4,595.24	\$4,356.14	+120.79%	\$4,595.24	\$1,973.00

ASSET CLASSES





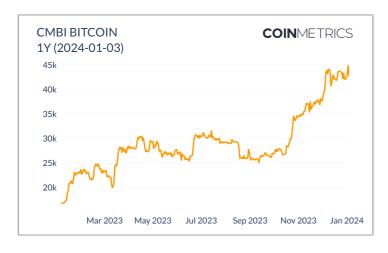


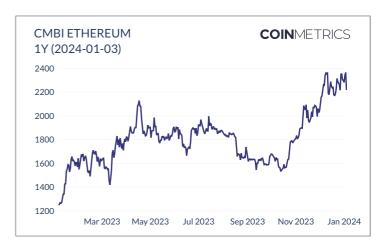
INDEX ROUNDUP

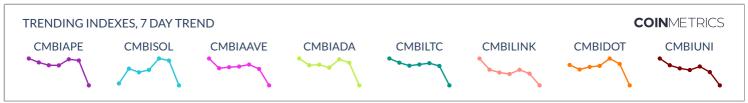
SINGLE ASSET INDEXES

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	\$42,742.44	+0.57%	\$44,921.23	\$42,004.05	+153.64%	\$44,921.23	\$16,851.58
СМВІВТСТ	\$45,921.98	+0.57%	\$48,262.84	\$45,128.66	+153.64%	\$48,262.84	\$18,105.14
СМВІЕТН	\$2,218.66	-5.71%	\$2,366.77	\$2,218.66	+77.07%	\$2,366.77	\$1,253.01
СМВІЕТНТ	\$2,408.56	-5.71%	\$2,569.35	\$2,408.56	+77.07%	\$2,569.35	\$1,360.26







MULTI ASSET INDEXES

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

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$4,356.14	-1.62%	\$4,595.24	\$4,356.14	+120.79%	\$4,595.24	\$1,973.00
CMBI10E	\$7,864.38	-6.15%	\$8,476.45	\$7,864.38	+109.63%	\$8,633.41	\$3,747.03
CMBI10EX	\$9,078.90	-5.42%	\$9,643.03	\$9,078.90	+83.91%	\$9,715.46	\$4,936.54
CMBI10M	\$14,202.01	-3.19%	\$14,788.80	\$14,202.01	+51.14%	\$15,099.48	\$9,310.27
CMBIBE	\$20,548.00	-1.11%	\$21,679.27	\$20,485.58	+124.61%	\$21,679.27	\$9,148.12





MARKET MOVEMENT

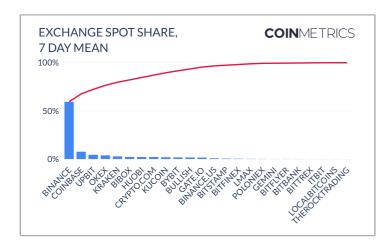
TRADING DIARY, 7 DAY

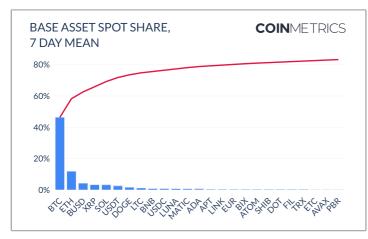
ADVANCING VOLUME \$18,178,071,330

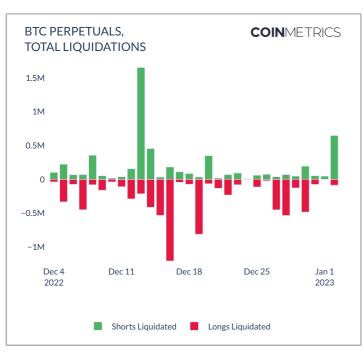
DECLINING VOLUME \$72,043,724,289

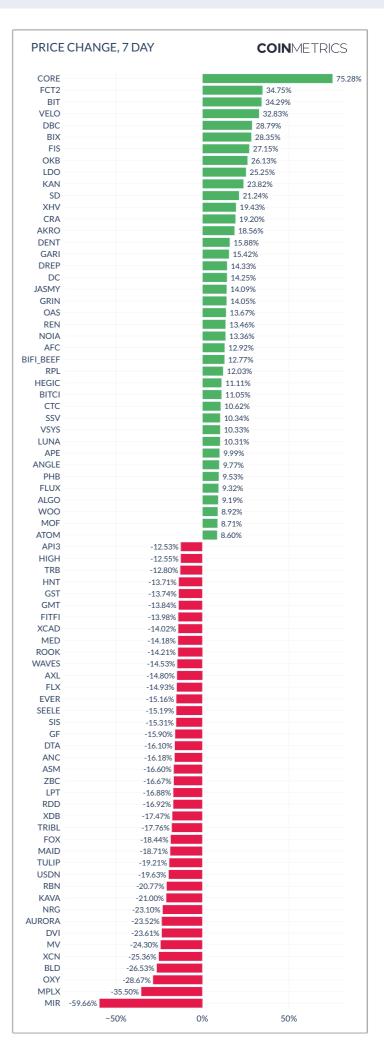
ADVANCES 220

DECLINES 432

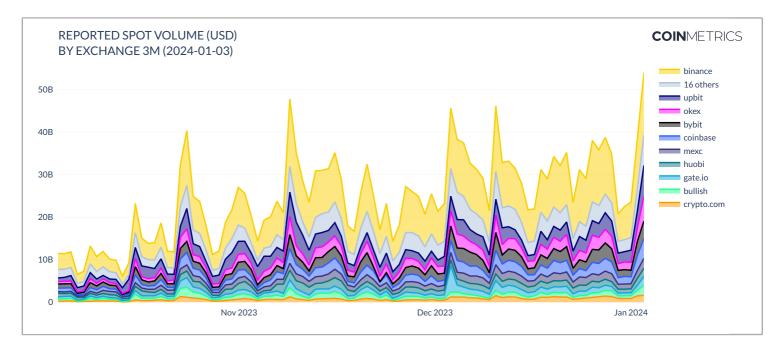


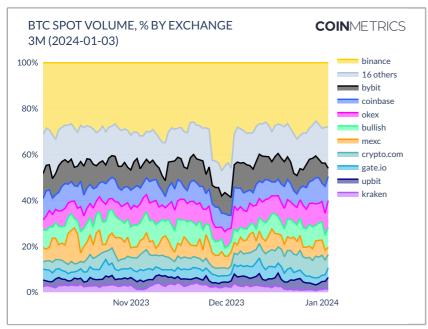






AGGREGATE VOLUME





BTC SPOT VOLUME LEADERS

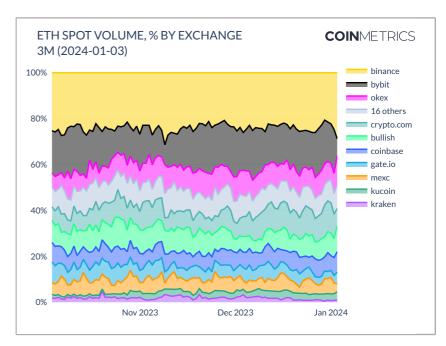
Top 10 exchanges by total BTC spot volume reported over past 3 months.

ASSET	90D CHANGE	90D AVERAGE	90D MAX	90D MIN
BINANCE	+231.32%	1,979,064,970	4,935,041,747	368,302,992
BYBIT	+12.15%	631,725,031	1,471,077,595	103,571,218
COINBASE	+300.44%	553,039,217	1,634,852,179	86,329,162
OKEX	+477.24%	543,215,388	1,832,974,440	90,577,692
BULLISH	+234.36%	511,759,934	1,639,377,390	50,887,961
MEXC	+82.51%	380,179,964	610,210,430	169,176,337
CRYPTO.COM	+380.28%	367,364,780	898,207,740	45,488,825
GATE.IO	+190.74%	281,756,169	1,185,199,996	34,817,795
UPBIT	+838.67%	212,438,906	799,696,513	37,417,272
KRAKEN	+66.67%	168,557,537	509,998,152	33,065,252

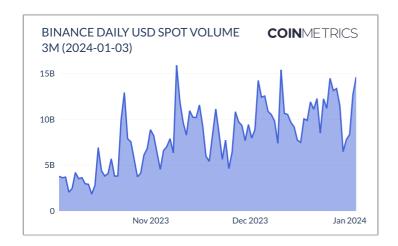
ETH SPOT VOLUME LEADERS

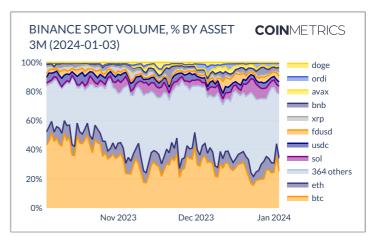
Top 10 exchanges by total ETH spot volume reported over past 3 months.

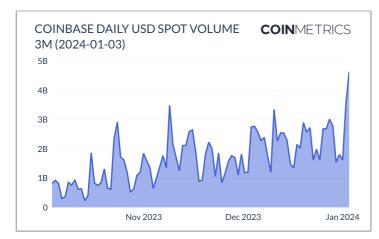
ASSET	90D CHANGE	90D AVERAGE	90D MAX	90D MIN
BINANCE	+370.83%	877,150,626	2,735,354,995	184,763,402
BYBIT	+50.32%	606,095,624	1,371,694,794	121,309,405
OKEX	+733.45%	338,894,530	1,091,551,826	40,857,637
СКУРТО.СОМ	+321.97%	326,054,378	746,254,277	47,836,148
BULLISH	+368.84%	323,661,748	904,786,946	46,931,409
COINBASE	+376.42%	251,333,035	683,092,379	38,701,779
GATE.IO	+158.87%	192,558,812	516,733,775	41,311,639
MEXC	+149.40%	186,561,814	268,465,907	66,996,585
KUCOIN	+1,085.95%	90,588,175	261,152,082	8,177,843
KRAKEN	+79.08%	67,494,294	295,403,187	9,629,503

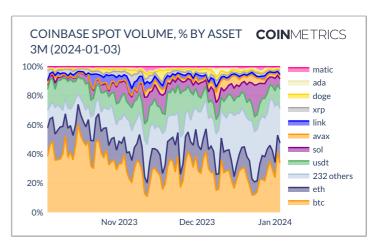


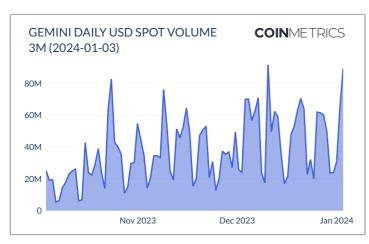
EXCHANGE SPOT VOLUME

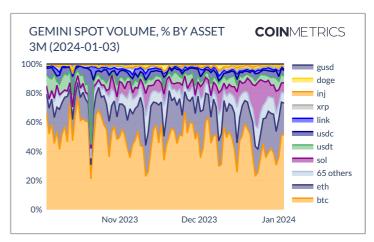


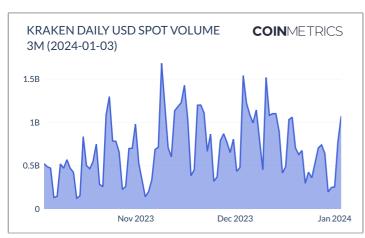


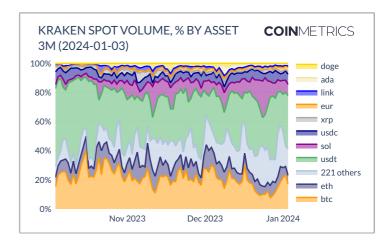




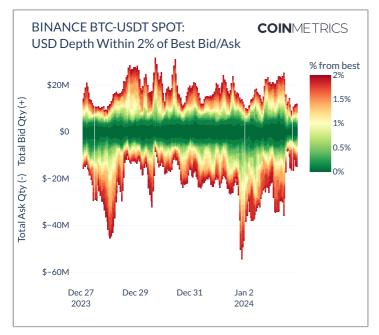


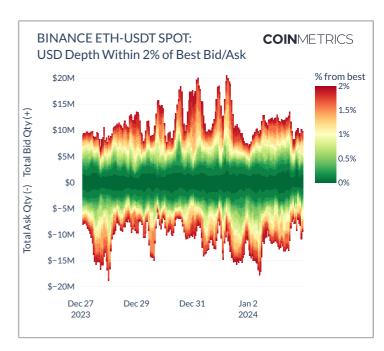


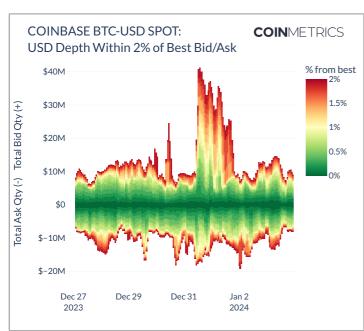


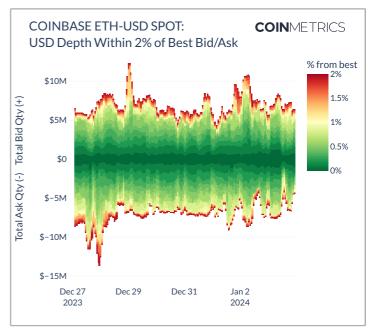


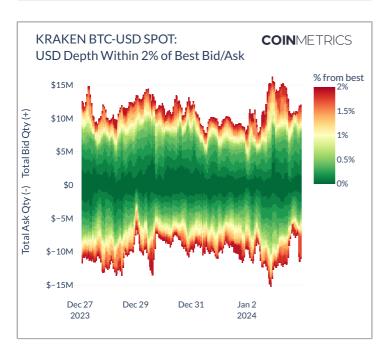
ORDER BOOK DEPTH

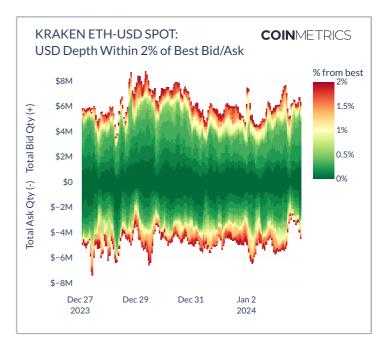




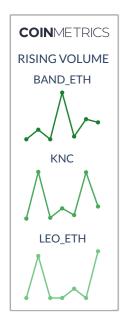


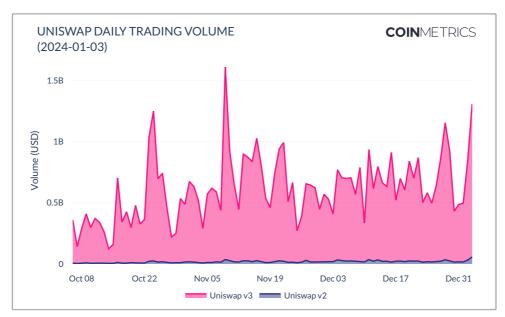




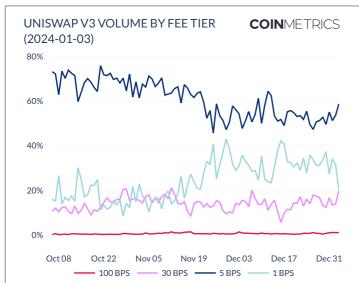


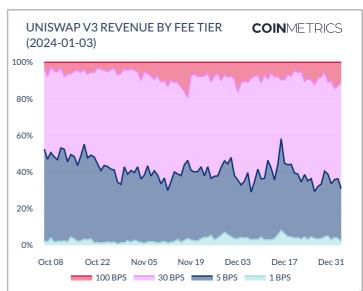
DEX DIGEST

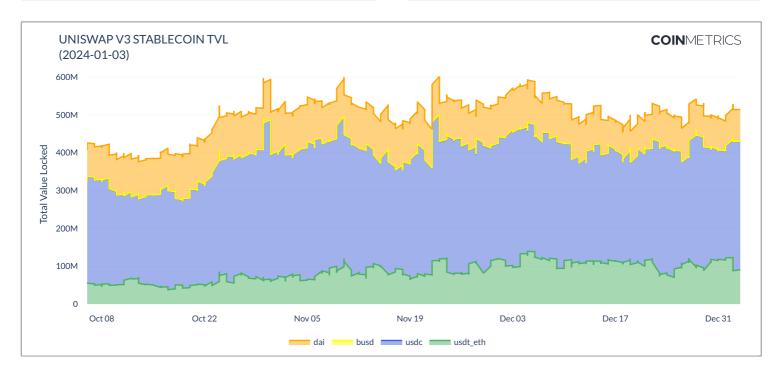










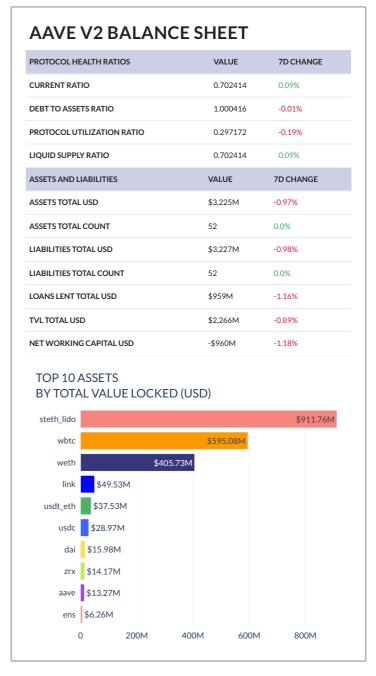


Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

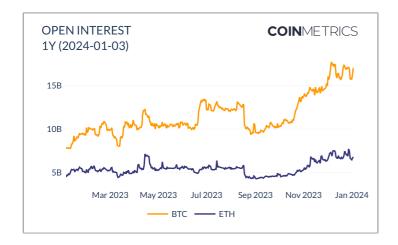
DEFI BALANCE SHEETS

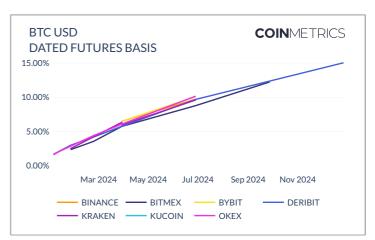


COMPOUND V2 BALANCE SHEET PROTOCOL HEALTH RATIOS 7D CHANGE VALUE **CURRENT RATIO** 0.752209 0.73% DEBT TO ASSETS RATIO 0.968052 -0.02% PROTOCOL UTILIZATION RATIO 0.280794 -1.85% LIQUID SUPPLY RATIO 0.752209 0.73% ASSETS AND LIABILITIES VALUE 7D CHANGE ASSETS TOTAL USD \$1,617M -0.04% ASSETS TOTAL COUNT 19 0.0% LIABILITIES TOTAL USD \$1,565M -0.05% LIABILITIES TOTAL COUNT 0.0% LOANS LENT TOTAL USD \$440M -1.9% TVI TOTAL USD \$1.178M 0.68% **NET WORKING CAPITAL USD** -\$388M -2 21% **TOP 10 ASSETS** BY TOTAL VALUE LOCKED (USD) \$469.74N wbtc eth \$455.77M \$50.50M dai usdt_eth \$42.41M \$36.41M bat usdc \$35.08M \$13.68M link \$3.71M comp \$2.31M zrx \$2.20M 100M 200M 300M 400M



FUTURES FEED





OPEN INTEREST

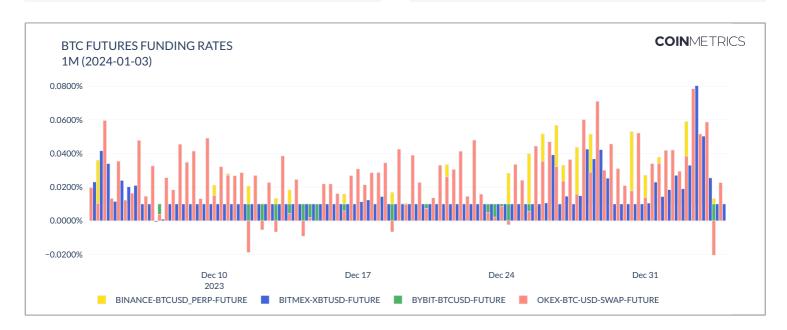
Sum of all reported open interest from futures markets in USD

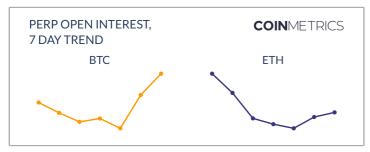
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.20%	16,373,055,031	17,070,202,273	15,689,567,071
ETH	-11.93%	6,908,140,476	7,731,535,256	6,478,900,362
XRP	-0.73%	574,083,903	589,499,631	562,569,738
ADA	-9.84%	253,152,151	272,038,225	244,433,974
LINK	-27.47%	263,019,561	326,888,079	237,079,120
CRO	+7.98%	8,704,827	9,405,899	8,369,461
UNI	-1.90%	93,141,746	105,947,980	81,833,710
LTC	-2.51%	261,286,475	271,961,474	253,194,185
ВСН	-8.96%	165,744,277	175,327,753	154,108,019

FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+111.07%	37,532,906,120	66,786,820,431	19,178,444,864
ETH	-4.95%	19,341,055,389	29,285,951,117	10,004,633,259
XRP	+13.90%	1,081,756,145	1,925,808,974	561,312,061
ADA	-52.26%	744,411,281	1,651,737,448	400,132,348
LINK	-62.40%	687,822,925	1,618,527,651	340,657,835
CRO	+235.76%	8,789,835	26,384,500	3,311,314
UNI	-63.69%	289,062,703	701,062,182	111,905,657
LTC	-39.41%	528,987,155	985,985,139	228,188,190
ВСН	-57.96%	710,397,619	1,220,457,523	389,290,410







OPTIONS SNAPSHOT

BTC OPEN INTEREST

ETH OPEN INTEREST

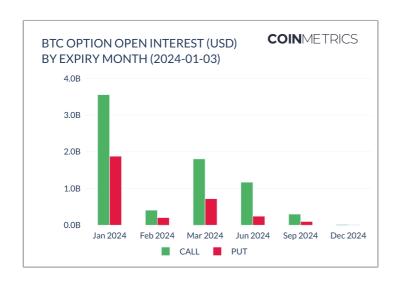
TOTAL	\$2,692,722,406	TOTAL	\$2,793,519,562
CALLS	\$1,805,182,364	CALLS	\$2,232,420,915
PUTS	\$887,540,042	PUTS	\$561,098,648

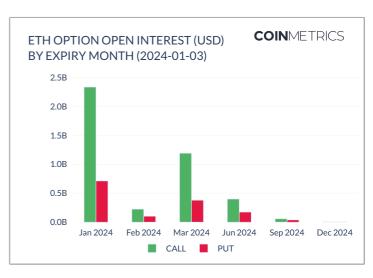


AT THE MONEY OPTIONS

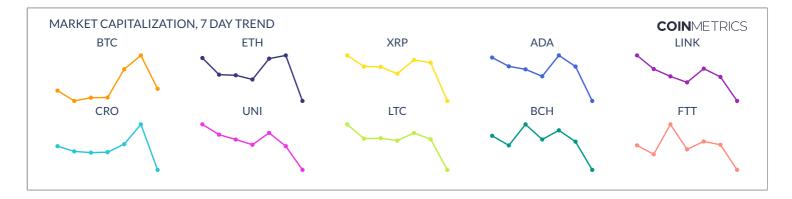
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

		(CALLS								PUTS	5		
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
11.2585	-79.58917	0.73301	0.21389	0.00018	0.742	0.0262	BTC-3JAN24-44000	0	0.742	0.00018	-0.78601	-2.87979	-79.71934	11.26113
9.70341	-195.3973	0.5304	0.32438	0.00024	0.7418	0.0207	BTC-3JAN24-44250	0	0.7418	0.00024	-0.67562	-1.17023	-195.3973	9.70341
8.54431	-60.48659	0.47615	0.13863	0.00013	0.7417	0.0152	BTC-3JAN24-44500	0	0.7417	0.00013	-0.86166	-3.17893	-60.23573	8.53277
10.6146	-241.64063	0.70337	0.44602	0.00024	0.4533	0.0096	BTC-3JAN24-44750	0	0.4533	0.00024	-0.55398	-0.92623	-241.64063	10.6146
11.92786	-95.66892	0.80933	0.23725	0.00017	0.622	0.0007	BTC-4JAN24-44000	0.0272	0.6223	0.00017	-0.76275	-2.80376	-95.66892	11.92786
13.84639	-168.19969	1.15332	0.41267	0.00019	0.6875	0.0006	BTC-4JAN24-44250	0.033	0.6875	0.00019	-0.58733	-1.77227	-168.19969	13.84639
9.58078	-76.8439	0.56388	0.16489	0.00013	0.7215	0.0004	BTC-4JAN24-44500	0.0386	0.7214	0.00013	-0.83511	-3.09026	-76.8439	9.58078
13.72527	-171.50659	1.10942	0.4033	0.00019	0.7905	0.0003	BTC-4JAN24-44750	0.0443	0.7905	0.00019	-0.5967	-1.7709	-171.50659	13.72527
41.97456	-38.16231	10.85393	0.44783	0.00009	0.6393	0.006	BTC-5JAN24-44000	0.0319	0.6393	0.00009	-0.55217	-15.66411	-38.16231	41.97456
41.07243	-37.34211	9.79586	0.40274	0.00009	0.6621	0.004	BTC-5JAN24-44500	0.0414	0.6621	0.00009	-0.59724	-17.02304	-37.34272	41.0731





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	+0.27%	841,791,939,299	880,296,744,332	822,504,553,591
ETH	-6.03%	291,735,108,019	298,566,853,960	279,554,817,579
XRP	-8.48%	61,852,769,147	63,511,550,075	58,124,768,749
ADA	-10.23%	20,842,126,452	21,599,374,643	19,291,241,989
LINK	-12.11%	15,218,269,985	16,084,826,678	14,137,712,386
CRO	-3.96%	9,945,129,853	10,351,756,121	9,590,707,078
UNI	-18.52%	7,317,291,987	7,874,343,480	6,415,716,553
LTC	-15.23%	5,383,591,679	5,692,146,758	4,825,155,737
всн	-10.80%	5,047,908,451	5,318,453,896	4,577,910,044
FTT	-11.87%	1,012,469,713	1,124,662,600	899,737,799

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.25%	577,988,735,991	604,419,217,231	564,761,668,428
ETH	-6.13%	248,461,787,861	254,130,385,883	237,979,974,628
XRP	-8.49%	29,611,632,454	30,407,643,982	27,824,870,165
ADA	-10.27%	18,584,467,432	19,259,245,715	17,196,408,444
LINK	-12.11%	8,474,583,392	8,957,247,691	7,872,732,360
CRO	-3.96%	987,647,913	1,028,028,244	952,440,582
UNI	-18.38%	2,045,625,412	2,197,977,250	1,794,088,910
LTC	-15.25%	4,175,370,317	4,415,447,133	3,742,213,860
ВСН	-10.83%	3,238,782,797	3,412,849,160	2,936,645,245
FTT	-11.87%	1,012,469,713	1,124,662,600	899,737,799

REALIZED CAP

 $\label{thm:continuous} USD\ value\ for\ all\ native\ units\ based\ on\ the\ USD\ closing\ price\ on\ the\ day\ that\ a\ unit\ last\ moved.$

BTC +0.61% 430,146,542,362 431,540,462,384 ETH -0.61% 164,013,169,351 164,784,306,393	428,924,198,169 163,139,836,425
ETH -0.61% 164,013,169,351 164,784,306,393	163,139,836,425
XRP +0.08% 54,446,162,034 54,728,008,653	54,298,643,703
ADA -0.23% 17,598,354,126 17,632,233,778	17,528,635,254
LINK -1.53% 10,257,072,986 10,326,208,498	10,168,186,251
CRO -0.03% 20,925,049,764 20,932,586,537	20,917,424,408
UNI -0.18% 8,670,508,916 8,687,408,882	8,644,467,028
LTC -0.32% 6,671,238,116 6,679,220,609	6,657,515,186
BCH +0.14% 4,781,090,621 4,787,070,461	4,774,945,552
FTT -0.85% 745,437,612 749,091,824	741,343,631

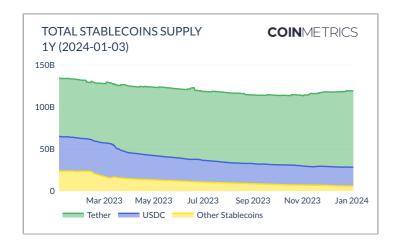
MARKET VALUE TO REALIZED VALUE

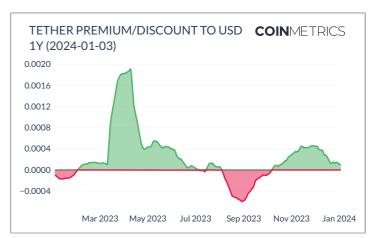
The ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.34%	1.96	2.04	1.92
ETH	-5.45%	1.78	1.81	1.71
XRP	-8.55%	1.14	1.17	1.07
ADA	-10.02%	1.18	1.22	1.10
LINK	-10.74%	1.48	1.56	1.39
CRO	-3.93%	0.48	0.49	0.46
UNI	-18.37%	0.84	0.91	0.74
LTC	-14.95%	0.81	0.85	0.72
всн	-10.92%	1.06	1.11	0.96
FTT	-11.12%	1.36	1.50	1.21



STABLECOINS REPORT





MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+0.00%	42,018,509,065	42,032,547,966	41,998,006,896
USDT_OMNI	+0.00%	888,225,887	888,522,654	887,792,494
USDT_TRX	+0.00%	48,840,608,151	48,856,926,398	48,816,777,262
PAX	+0.74%	368,106,276	371,111,482	364,927,590
DAI	+0.78%	3,726,088,212	3,755,485,135	3,698,972,453
USDC	-0.35%	22,334,223,216	22,467,221,619	22,164,206,855
BUSD	-0.03%	1,011,947,839	1,012,036,298	1,011,726,692
GUSD	-0.61%	38,898,292	39,130,455	38,719,788

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+25.26%	4,202,354,968	6,556,661,269	2,161,395,780
USDT_OMNI	+122.78%	792,821	5,365,087	10,904
USDT_TRX	+4.61%	9,183,128,981	12,730,099,617	5,672,561,535
PAX	-20.53%	9,272,735	19,499,825	2,003,266
DAI	-26.45%	3,684,444,942	4,907,745,999	2,126,235,631
USDC	+2.81%	4,263,575,462	5,574,968,516	2,517,929,436
BUSD	-73.84%	1,768,776	4,183,967	665,928
GUSD	+279.91%	1,289,519	2,458,227	133,645





TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-0.78%	122,030	139,283	95,806
USDT_OMNI	+50.00%	9	21	4
USDT_TRX	-1.23%	1,631,788	1,839,750	1,357,605
PAX	-52.50%	136	280	59
DAI	+8.03%	5,138	5,989	4,162
USDC	+4.91%	52,770	61,352	44,331
BUSD	+24.03%	1,150	2,778	299
GUSD	-23.71%	311	1,110	50

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

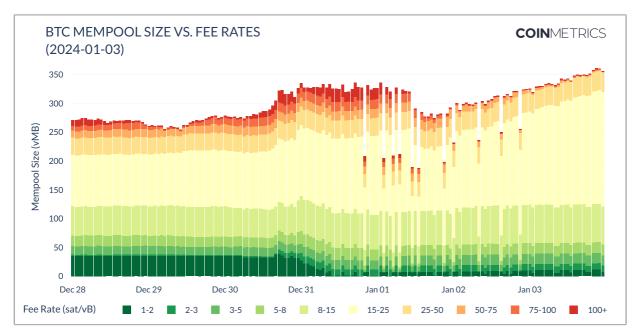
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+4.16%	745	996	490
USDT_OMNI	+62.93%	981	3,054	184
USDT_TRX	+21.53%	305	353	265
PAX	+164.81%	2,665	5,991	487
DAI	+17.53%	3,155	4,760	1,858
USDC	+13.74%	1,080	1,500	679
BUSD	+27.81%	350	566	220
GUSD	-55.01%	327	990	40

VELOCITY

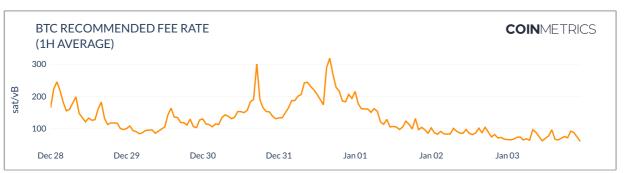
Number of times that an average native unit among the active supply has been transferred in the past 1 year $\,$

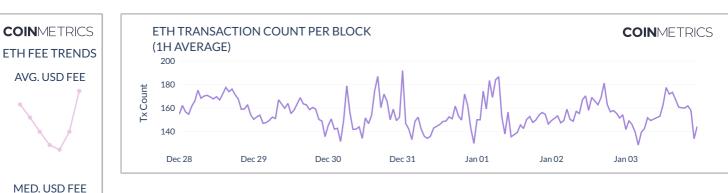
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+0.84%	35.86	36.06	35.76
USDT_OMNI	+18.57%	10.69	11.20	9.43
USDT_TRX	+0.49%	81.15	81.38	80.99
PAX	+0.65%	48.80	49.14	48.61
DAI	+2.67%	161.78	163.41	159.16
USDC	-1.63%	92.67	93.27	91.75
BUSD	-4.57%	97.32	99.62	95.07
GUSD	+0.33%	86.14	86.68	85.65

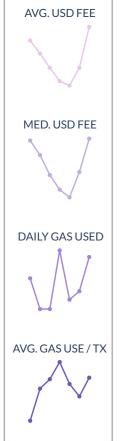
FEE MARKET

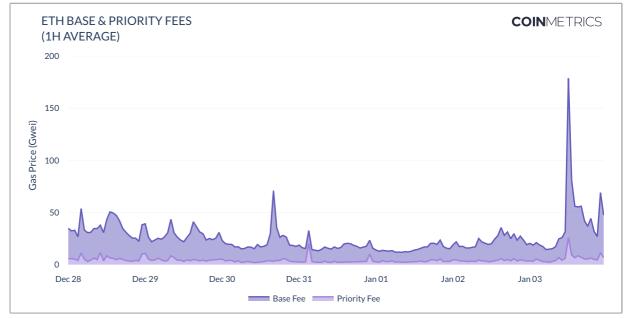












NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+10.81%	853,402	940,343	787,521
ETH	-12.22%	513,528	562,774	477,193
XRP	+95.62%	61,224	72,680	31,566
ADA	-5.18%	48,167	55,496	41,504
LINK	-11.12%	4,515	5,685	3,554
CRO	+17.34%	438	553	345
UNI	-25.58%	1,287	1,673	1,059
LTC	+96.77%	920,577	1,378,540	666,344
ВСН	+81.62%	63,533	140,386	32,701
FTT	-25.00%	194	245	152

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.01%	13,448,053	13,449,123	13,447,154
ETH	-0.00%	107,808,447	107,827,630	107,772,792
XRP	-0.01%	47,868,601,522	47,871,609,909	47,865,177,779
ADA	-0.01%	30,930,418,097	30,935,236,197	30,922,754,001
LINK	-0.00%	556,868,870	556,877,492	556,860,413
CRO	-0.00%	9,930,970,063	9,931,049,409	9,930,869,269
UNI	+0.18%	279,565,989	279,639,678	279,131,493
LTC	+0.01%	57,425,477	57,433,480	57,421,601
ВСН	-0.00%	12,576,171	12,577,469	12,575,002
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	+20.32%	540,656	724,837	364,237
ETH	-7.87%	1,110,167	1,185,508	1,061,956
XRP	+276.15%	5,870,193	7,226,301	1,641,313
ADA	-8.66%	88,816	101,046	77,316
LINK	-19.84%	5,911	8,544	4,320
CRO	+41.89%	498	651	353
UNI	-36.82%	1,803	2,955	1,121
LTC	+132.40%	767,691	1,232,146	505,483
ВСН	+155.02%	47,912	118,952	15,069
FTT	-40.05%	321	530	193

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+2.11%	6,671,477,938	8,288,168,689	4,488,278,804
ETH	-13.81%	4,100,703,187	5,617,976,986	2,767,624,555
XRP	+47.68%	713,543,359	1,221,752,804	259,850,395
ADA	-13.97%	16,200,668,033	18,824,768,533	14,618,504,528
LINK	-31.09%	182,222,412	312,116,007	52,276,924
CRO	+380.45%	1,788,417	3,127,337	366,476
UNI	-36.61%	34,806,481	65,767,222	18,531,997
LTC	-23.33%	96,325,891	132,601,151	70,195,405
ВСН	-38.50%	60,207,931	95,825,288	34,758,852
FTT	-37.84%	3,124,954	8,211,753	1,235,218

ADDRESSES ≥ \$1

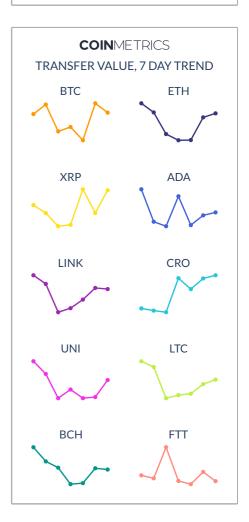
Count of addresses holding at least \$1 worth of native units

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.02%	45,397,111	45,549,604	45,297,175
ETH	-1.58%	67,819,213	68,199,566	67,090,251
XRP	+0.52%	4,992,551	5,002,446	4,976,580
ADA	-1.14%	3,893,920	3,910,589	3,861,302
LINK	-0.35%	575,186	576,027	574,034
CRO	-0.13%	155,715	156,645	155,249
UNI	-0.83%	299,990	300,991	298,487
LTC	-2.59%	2,448,562	2,468,865	2,405,034
ВСН	-2.54%	4,677,244	4,731,006	4,573,186
FTT	-0.12%	24,101	24,184	24,033

ADDRESSES ≥ \$1M

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.06%	89,630	91,227	88,907
ETH	-4.97%	12,430	12,626	11,998
XRP	-5.25%	1,330	1,353	1,282
ADA	-7.04%	1,568	1,604	1,491
LINK	-7.72%	722	751	693
CRO	+2.63%	38	39	37
UNI	-8.01%	351	362	333
LTC	-12.47%	471	489	428
ВСН	-12.56%	405	423	362
FTT	-8.00%	25	26	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 $^{\text{TM}}$, 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 12/31/2023 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 12/31/2023 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 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 <u>Data Encyclopedia</u>.

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.

© 2023 Coin Metrics Inc. All rights reserved. Redistribution is not permitted without consent. This newsletter does not constitute investment advice and is for informational purposes only and you should not make an investment decision on the basis of this information. The newsletter is provided "as is' and Coin Metrics will not be liable for any loss or damage resulting from information obtained from the newsletter.