STATE OF THE MARKET

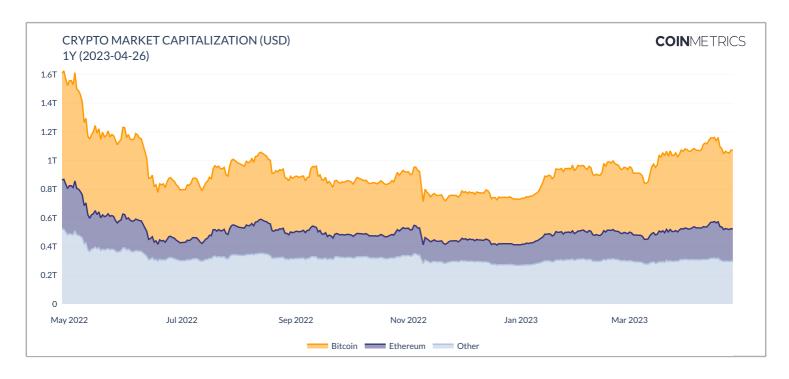
APR. 20 - 26, 2023

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



MARKET SUMMARY

After months of being taken to court, crypto firms are finally going on the offensive. Following their acquisition of a license to operate in Bermuda last week, Coinbase kicked off Monday by suing the SEC, petitioning that the regulator be forced to make a public ruling on the exchange's requests for regulatory clarity. The suit arrives at a moment of perceived skepticism about the SEC. On Tuesday, Coinbase CEO Brian Armstrong retweeted a 2018 video of then-MIT lecturer Gary Gensler, where the future SEC chief remarked that "3/4 of the [crypto] market is non-securities." Gensler's contradictory comments perfectly encapsulate crypto's state of regulatory ambiguity in the United States, just as France moves to 'fast-track' registration for the Europe Union's newly-approved digital assets framework MiCA. U.S. House Financial Services Committee Chair Rep. Patrick McHenry acknowledges MiCA's passage shows Europe is "ahead of the game in Web3," a shift he claims should "send chills up the spines of Americans." Asia also looks eager to capitalize on a lapse in U.S. leadership, with Gemini announcing the buildout of their 2nd-largest engineering hub in India as part of "big plans for international growth this year in APAC." Meanwhile, Asia's incumbent exchange leader Binance is moving further into the staking game. On Monday, Binance unveiled 'Wrapped Beacon ETH' (WBETH), a liquid staking derivative designed to compete with yield-bearing tokens from Lido (stETH), Rocket Pool (RETH), and Coinbase (cbETH). A social media panic erupted on Wednesday after @tier10k (a.k.a. "db", the "FASTEST MARKET-MOVING NEWS IN CRYPTO") tweeted that "Mt Gox and US Govt Wallets" were spotted moving funds on-chain, citing an alert from data provider Arkham Intelligence. Though the news triggered fears of a long-anticipated sale of seized assets, the alerts appear to have been misinterpreted, with Arkham later claiming that a "bug fix" caused a series of old alerts to misfire for a "small subset of users." Despite the false alarm, the confusion came paired with a -7% decline in BTC price, with the broader derivatives market contracting more than 15% as traders (and liquidation engines) quickly closed out positions. Though Mt. Gox's creditors won't be paid out until at least September, a mysterious awakening of long-dormant wallets has prompted equal concern in on-chain circles. On Monday, an address containing more than 1,000 BTC sent its first outbound transaction (~400 BTC) after 12 years of HODLing. In parallel, an Ethereum ICO participant sent its own first outgoing payment after nearly 8 years of inactivity, transferring just 1 ETH from of its \$4.36M stack. With exchanges changing territories and crypto's oldest whales beginning to stir, the parallel worlds of on-chain and exchange-based activity will force investors to seek trusted sources of crypto intelligence more than ever before.

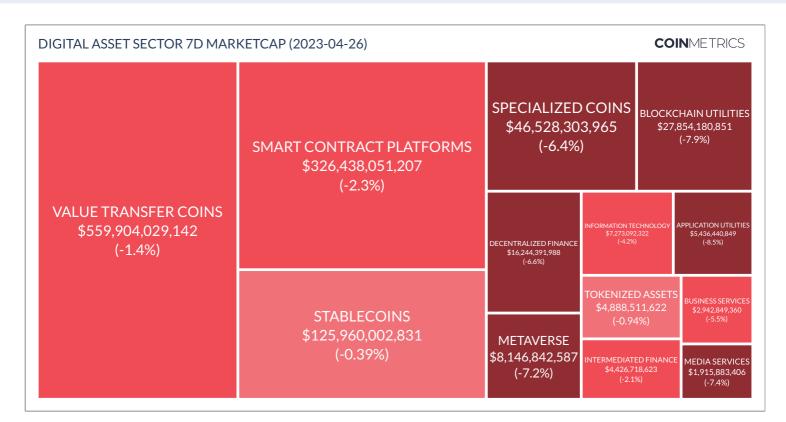


PRICE (CMBI CONSTITUENTS)

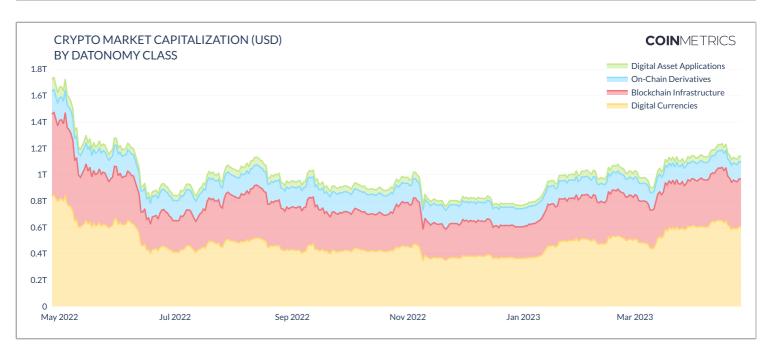
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$28,499.67	+1.29%	\$28,499.67	\$27,308.75	-28.82%	\$40,039.98	\$15,799.60
ETH	\$1,866.33	-3.08%	\$1,925.60	\$1,831.70	-36.87%	\$2,956.31	\$923.00
SOL	\$21.62	-0.66%	\$21.81	\$21.12	-78.13%	\$98.87	\$8.35
DOT	\$5.88	-3.79%	\$6.11	\$5.83	-65.62%	\$17.10	\$4.27
ADA	\$0.39	-0.76%	\$0.40	\$0.38	-53.21%	\$0.87	\$0.24
DOGE	\$0.08	-5.71%	\$0.08	\$0.08	-42.80%	\$0.14	\$0.05
MATIC	\$0.99	-5.67%	\$1.05	\$0.96	-21.21%	\$1.52	\$0.34
BNB	\$332.57	+5.02%	\$332.71	\$316.66	-17.91%	\$405.14	\$189.63
AVAX	\$17.14	-7.02%	\$18.43	\$16.65	-74.77%	\$67.92	\$10.78
АТОМ	\$10.76	-5.23%	\$11.35	\$10.71	-48.59%	\$20.93	\$5.73
CMBI10	\$3,100.66	-0.24%	\$3,108.00	\$3,009.24	-38.09%	\$5,008.61	\$1,838.40

ASSET CLASSES





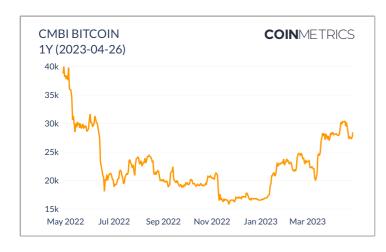


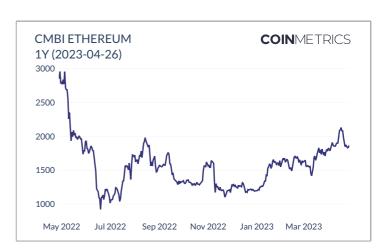
INDEX ROUNDUP

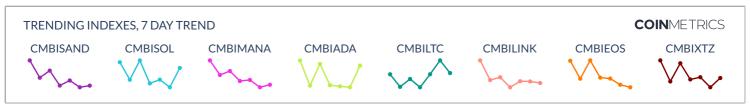
SINGLE ASSET INDEXES

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	\$28,499.67	+1.29%	\$28,499.67	\$27,308.75	-28.82%	\$40,039.98	\$15,799.60
СМВІВТСТ	\$30,619.71	+1.29%	\$30,619.71	\$29,340.21	-28.82%	\$43,018.48	\$16,974.91
СМВІЕТН	\$1,866.34	-3.08%	\$1,925.60	\$1,831.70	-36.87%	\$2,956.31	\$923.00
СМВІЕТНТ	\$2,026.08	-3.08%	\$2,090.42	\$1,988.48	-36.87%	\$3,209.34	\$1,002.00



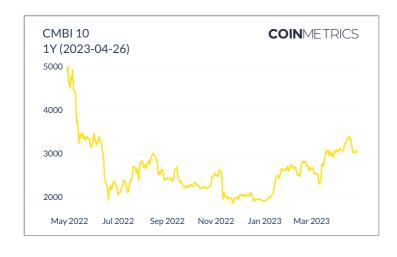




MULTI ASSET INDEXES

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

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$3,100.66	-0.24%	\$3,108.00	\$3,009.24	-38.09%	\$5,008.61	\$1,838.40
CMBI10E	\$5,182.19	-2.50%	\$5,314.93	\$5,099.97	-57.58%	\$12,216.32	\$3,409.70
CMBI10EX	\$7,053.57	-2.27%	\$7,217.52	\$6,949.16	-47.87%	\$13,530.50	\$4,169.19
CMBI10M	\$10,133.57	-1.97%	\$10,337.04	\$10,068.87	-34.67%	\$16,189.37	\$9,310.27
CMBIBE	\$14,790.69	-0.25%	\$14,827.72	\$14,313.21	-31.79%	\$21,684.34	\$8,387.96





MARKET MOVEMENT

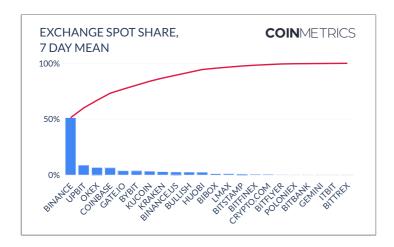
TRADING DIARY, 7 DAY

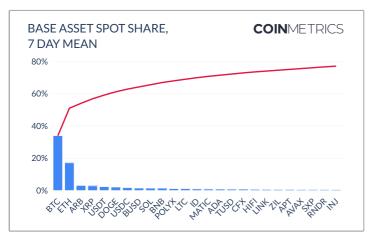
ADVANCING VOLUME \$9,360,755,498

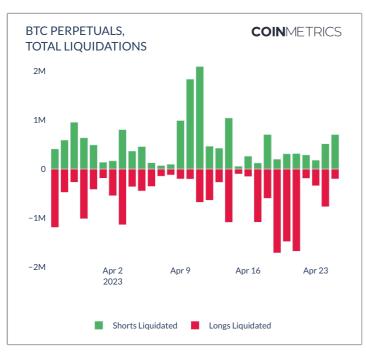
DECLINING VOLUME \$152,487,510,641

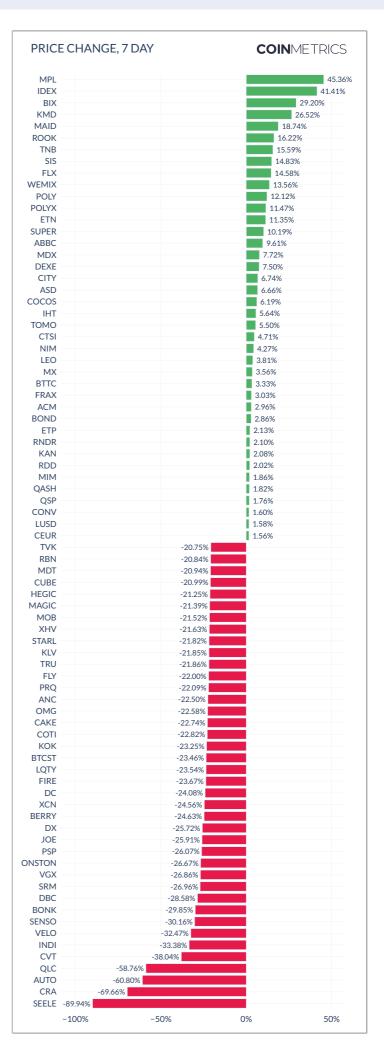
ADVANCES 61

DECLINES 587

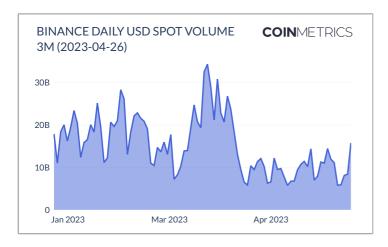


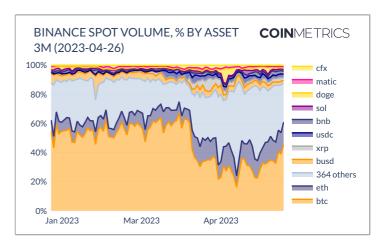




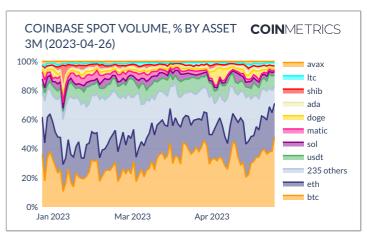


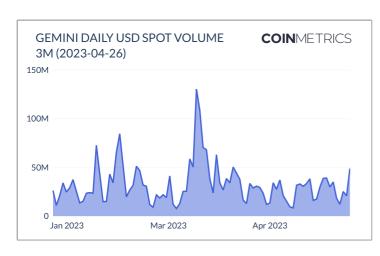
EXCHANGE SPOT VOLUME

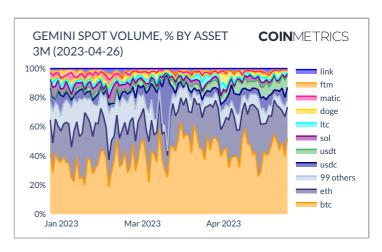


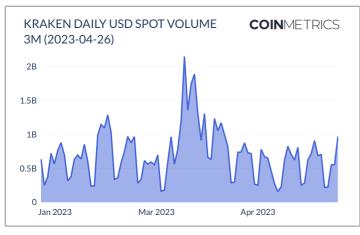


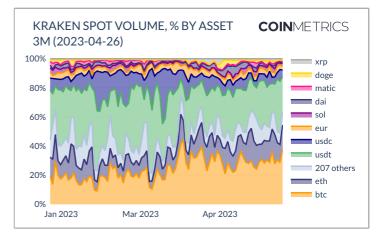




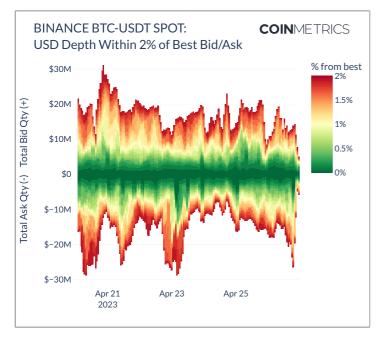


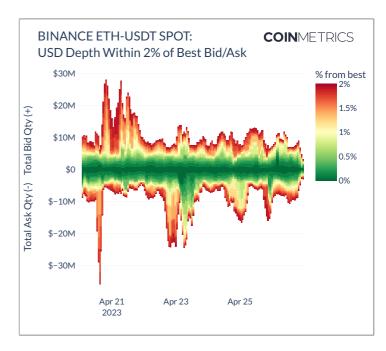


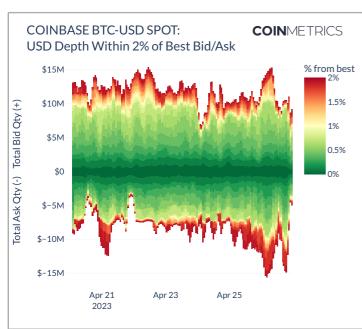


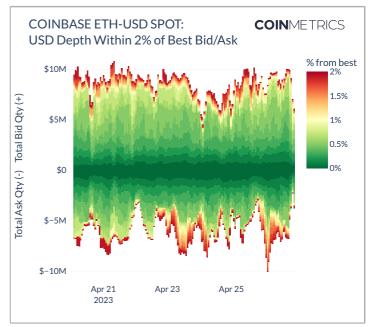


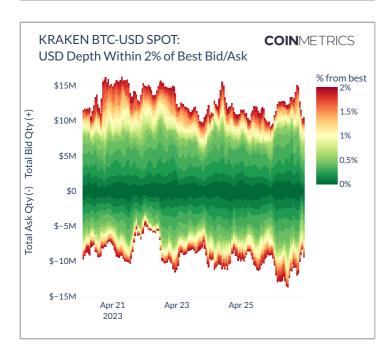
ORDER BOOK DEPTH

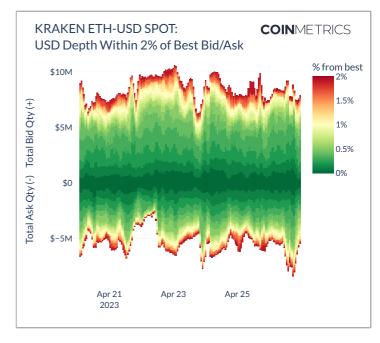






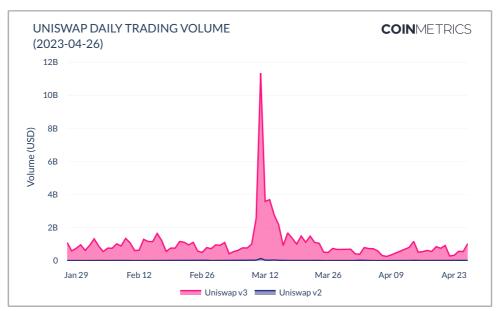




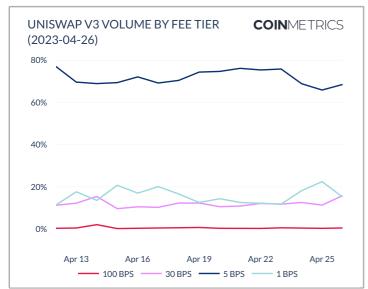


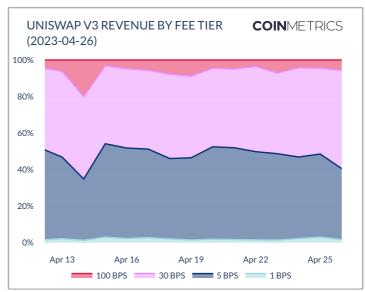
DEX DIGEST

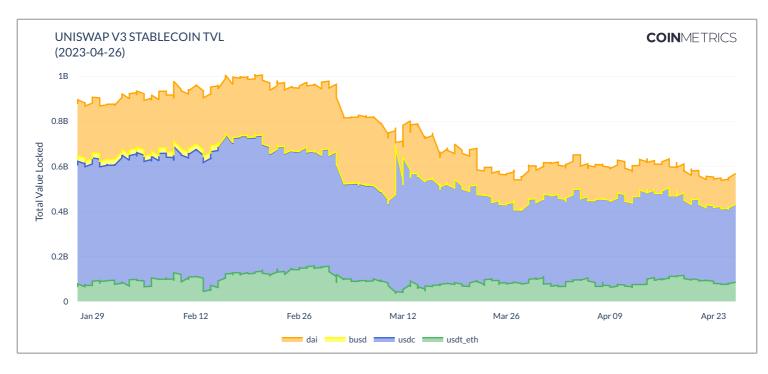






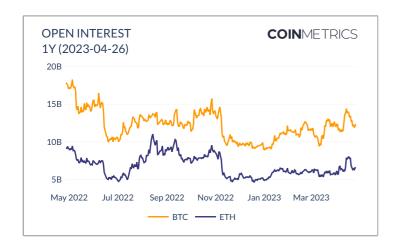


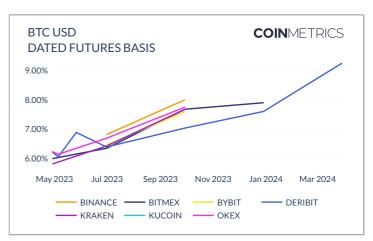




Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

FUTURES FEED





OPEN INTEREST

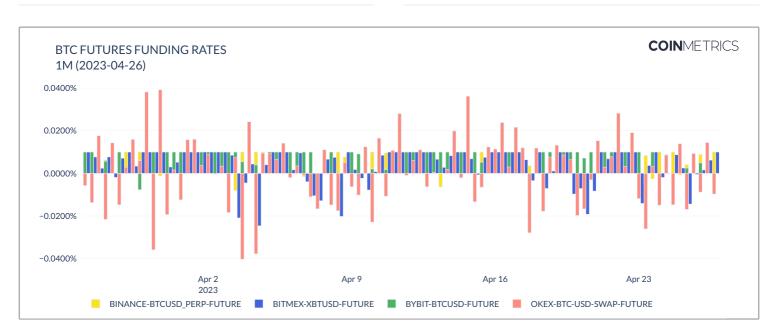
Sum of all reported open interest from futures markets in USD

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-3.01%	12,324,583,417	12,785,371,210	11,896,115,136
ETH	-4.01%	6,504,659,939	6,803,966,974	6,306,404,266
XRP	-9.15%	480,586,022	511,694,035	452,806,869
ADA	-11.19%	223,432,369	248,358,257	214,869,062
CRO	+1.63%	20,565,670	21,292,018	20,110,065
LINK	-5.74%	136,673,706	143,673,721	129,919,718
LTC	+1.55%	450,312,400	517,989,907	402,197,733
UNI	+3.17%	47,548,020	48,859,909	44,928,172
ВСН	-2.81%	148,099,127	152,593,239	144,070,746

FUTURES VOLUME

USD value of all reported futures volume

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+105.61%	39,049,788,365	83,601,674,379	19,708,354,058
ETH	+63.86%	21,786,204,524	37,385,556,451	10,434,906,198
XRP	+36.13%	1,416,725,930	1,929,584,211	1,052,193,804
ADA	+36.40%	512,268,521	811,647,458	338,751,832
CRO	+1,060.26%	6,384,947	27,233,512	1,127,090
LINK	-4.71%	407,791,529	577,720,107	213,667,131
LTC	+28.05%	957,272,331	1,536,537,954	439,679,908
UNI	+8.15%	88,152,685	121,325,463	55,485,309
ВСН	+45.45%	109,954,635	174,947,167	66,227,211







OPTIONS SNAPSHOT

BTC OPEN INTEREST

ETH OPEN INTEREST

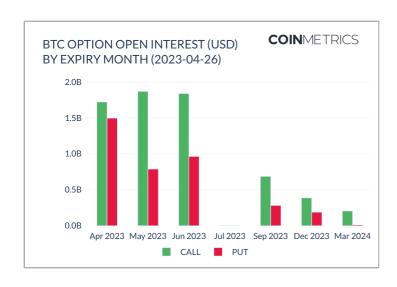
TOTAL	\$9,783,337,052	TOTAL	\$5,548,987,503
CALLS	\$6,363,232,015	CALLS	\$3,808,517,969
PUTS	\$3,420,105,037	PUTS	\$1,740,469,534

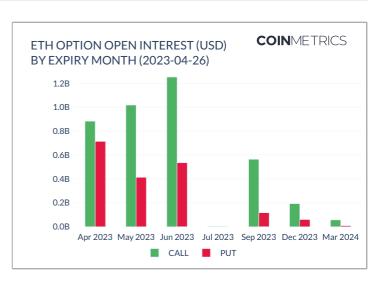


AT THE MONEY OPTIONS

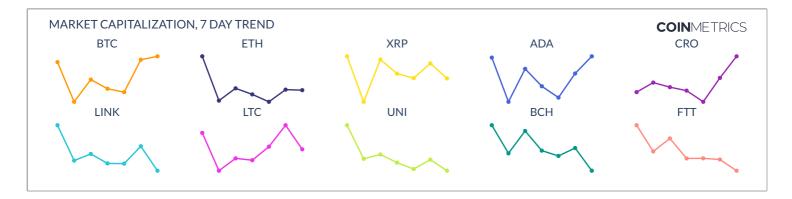
Market greeks, implied volatility, and mark contract prices for BTC options at or near strike price.

		(CALLS								PUTS	5		
VEGA	THETA	RHO	DELTA	GAMMA	IV	MARK	SYMBOL	MARK	IV	GAMMA	DELTA	RHO	THETA	VEGA
7.88445	-102.38688	0.60909	0.41944	0.00037	0.782	0.0337	BTC-27APR23-27500	0.0008	0.782	0.00037	-0.58056	-0.89672	-102.38688	7.88445
7.31097	-95.00573	0.48117	0.33047	0.00035	0.6766	0.025	BTC-27APR23-27750	0.0012	0.6766	0.00035	-0.66953	-1.03832	-95.00573	7.31097
6.43407	-83.92655	0.36723	0.25166	0.0003	0.6436	0.0176	BTC-27APR23-28000	0.0024	0.6436	0.0003	-0.74834	-1.16595	-83.92655	6.43407
7.02103	-104.12766	0.51543	0.4774	0.00053	0.6103	0.0111	BTC-27APR23-28250	0.0045	0.6103	0.00053	-0.5226	-0.58856	-104.12766	7.02103
13.52062	-55.68361	2.15021	0.5366	0.00026	0.6403	0.037	BTC-28APR23-27500	0.0041	0.6402	0.00026	-0.4634	-2.03182	-55.68361	13.52062
9.02012	-65.55156	0.73448	0.33647	0.00034	0.6206	0.0299	BTC-28APR23-27750	0.0058	0.6204	0.00034	-0.66353	-1.54528	-65.55156	9.02012
40.20241	-12.01739	14.62812	0.29467	0.00005	0.6074	0.0234	BTC-28APR23-28000	0.0082	0.6074	0.00005	-0.70534	-55.94574	-12.01708	40.20136
6.95514	-52.77372	0.44165	0.2017	0.00025	0.5977	0.0177	BTC-28APR23-28250	0.0115	0.5977	0.00025	-0.79842	-1.87947	-52.75315	6.95243
6.57518	-61.16449	1.81837	0.82925	0.00018	0.581	0.0393	BTC-29APR23-27500	0.0063	0.5808	0.00018	-0.16997	-0.40712	-60.99383	6.55684
8.12362	-98.54664	1.18302	0.67963	0.00028	0.5714	0.0325	BTC-29APR23-27750	0.0084	0.5714	0.00028	-0.32037	-0.60098	-98.54664	8.12362





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	+0.50%	539,663,804,541	549,432,360,964	528,172,405,707
ETH	-3.67%	226,141,457,487	234,390,028,135	222,820,852,179
XRP	-2.63%	46,454,984,291	47,399,197,935	44,830,556,026
ADA	+0.13%	13,370,063,838	13,665,954,121	13,027,809,737
CRO	+5.34%	6,853,306,863	7,133,748,909	6,674,286,081
LINK	-6.89%	7,178,213,972	7,514,916,157	6,997,466,315
LTC	-2.24%	6,417,897,708	6,631,054,339	6,224,178,942
UNI	-7.52%	5,477,526,753	5,783,450,259	5,348,450,080
ВСН	-4.30%	2,329,398,929	2,380,248,650	2,277,937,108
FTT	-13.95%	548,376,283	596,885,288	513,621,209

REALIZED CAP

 ${\sf USD\,value\,for\,all\,native\,units\,based\,on\,the\,USD\,closing\,price\,on\,the\,day\,that\,a\,unit\,last\,moved.}$

BTC +	+0.13%			
		385,654,801,131	385,959,735,071	385,470,130,858
ETH -	-0.54%	166,237,220,613	167,350,510,691	165,416,811,628
XRP -	-0.63%	49,351,493,869	49,492,207,157	49,182,662,116
ADA +	+0.39%	18,191,937,334	18,245,840,306	18,038,423,970
CRO +	+0.02%	22,294,086,153	22,296,678,663	22,292,971,126
LINK -	-0.45%	8,344,072,030	8,367,818,951	8,329,847,137
LTC -	-0.19%	6,868,492,532	6,880,013,311	6,862,012,315
UNI -	-7.38%	9,366,632,264	9,581,717,917	8,874,811,670
всн -	-3.04%	4,455,315,196	4,485,287,300	4,348,719,783
FTT -	-1.04%	913,351,368	924,379,414	909,047,604

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.40%	384,998,490,974	391,804,487,888	376,905,312,513
ETH	-3.24%	206,080,190,291	213,533,844,290	202,620,684,038
XRP	-2.45%	21,078,398,794	21,494,978,169	20,329,926,529
ADA	+0.10%	11,795,951,937	12,057,123,937	11,494,460,573
CRO	+5.34%	868,872,413	904,413,784	846,173,605
LINK	-6.89%	3,654,806,520	3,826,349,254	3,562,685,075
LTC	-2.94%	5,595,966,690	5,764,033,548	5,447,920,238
UNI	-7.18%	1,270,847,150	1,341,100,206	1,243,981,926
всн	-3.64%	1,567,908,710	1,601,195,060	1,542,951,843
FTT	-13.95%	528,989,327	575,783,375	495,462,962

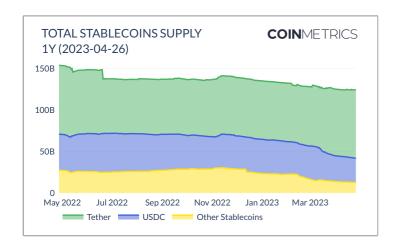
MARKET VALUE TO REALIZED VALUE

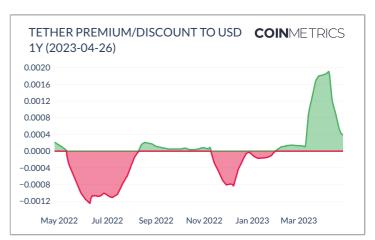
 $The \ ratio \ of \ a \ cryptoasset's \ market \ cap \ (aka \ market \ value) \ to \ realized \ cap \ (aka \ realized \ value).$

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.37%	1.40	1.42	1.37
ETH	-3.15%	1.36	1.40	1.34
XRP	-2.02%	0.94	0.96	0.91
ADA	-0.26%	0.73	0.76	0.71
CRO	+5.33%	0.31	0.32	0.30
LINK	-6.46%	0.86	0.90	0.84
LTC	-2.04%	0.93	0.97	0.91
UNI	-0.16%	0.58	0.60	0.57
ВСН	-1.29%	0.52	0.53	0.52
FTT	-13.04%	0.60	0.65	0.56



STABLECOINS REPORT





MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+0.03%	36,286,748,654	36,297,789,749	36,278,747,628
USDT	+0.03%	888,084,622	888,357,348	887,891,308
USDT_TRX	+0.03%	45,136,996,164	45,150,803,125	45,127,116,639
PAX	-2.50%	1,044,540,620	1,063,516,827	1,036,890,901
DAI	-1.23%	4,798,467,847	4,851,515,241	4,779,074,907
USDC	-0.95%	29,249,523,490	29,470,797,649	29,130,589,330
BUSD	-4.17%	6,425,697,612	6,581,591,756	6,307,207,251
GUSD	+5.69%	461,899,667	476,244,064	450,624,361

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-20.70%	3,133,090,137	4,831,162,697	1,276,390,849
USDT	-44.61%	845,408	2,741,866	77,626
USDT_TRX	+3.10%	8,634,047,631	10,480,756,879	5,344,000,527
PAX	-83.65%	67,235,200	216,743,627	24,630,738
DAI	+72.36%	267,221,625	567,452,981	67,371,857
USDC	+27.57%	3,788,738,722	5,897,456,890	1,552,146,846
BUSD	+6.04%	162,996,814	369,579,722	46,532,197
GUSD	-50.04%	18,245,127	45,073,427	392,912





TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-4.69%	99,681	117,739	72,804
USDT	-59.70%	67	152	21
USDT_TRX	+2.40%	2,123,411	2,380,346	1,677,839
PAX	-28.81%	153	243	94
DAI	+17.05%	3,687	4,812	2,543
USDC	+9.29%	36,004	48,178	25,593
BUSD	+2.79%	714	832	529
GUSD	+27.87%	72	122	48

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

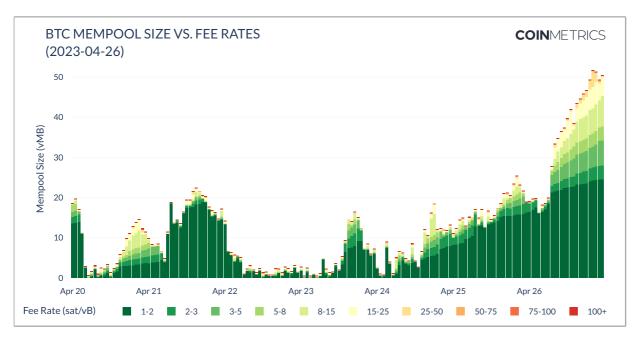
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+2.96%	742	965	527
USDT	+4,368.54%	4,748	14,295	7
USDT_TRX	-13.02%	124	160	100
PAX	-37.31%	107,330	199,684	4,981
DAI	-49.61%	1,420	2,100	788
USDC	+2.17%	1,218	1,710	914
BUSD	+37.01%	646	1,000	416
GUSD	+308.21%	2,631	4,898	875

VELOCITY

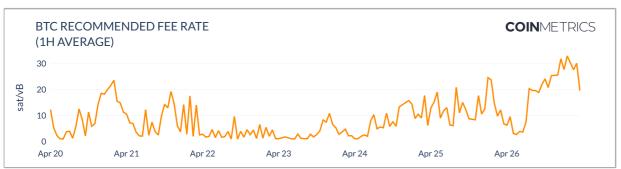
Number of times that an average native unit among the active supply has been transferred in the past 1 year

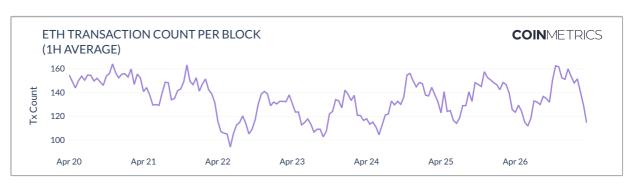
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+3.26%	40.70	41.32	39.86
USDT	-0.08%	3.08	3.08	3.08
USDT_TRX	+0.59%	60.87	61.09	60.73
PAX	+3.43%	14.59	14.73	14.25
DAI	+1.88%	270.46	271.90	266.17
USDC	+1.09%	123.23	123.78	122.16
BUSD	+4.44%	46.22	47.10	45.09
GUSD	-5.48%	15.76	16.14	15.26

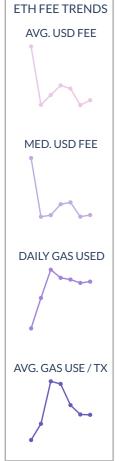
FEE MARKET



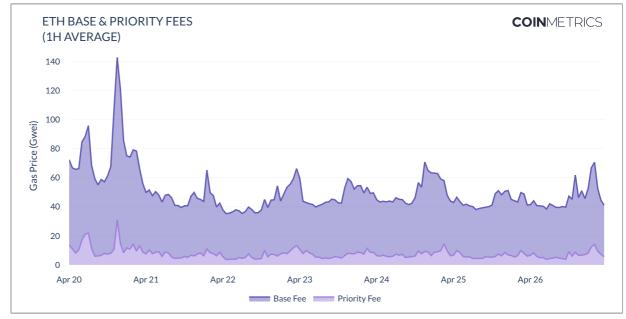




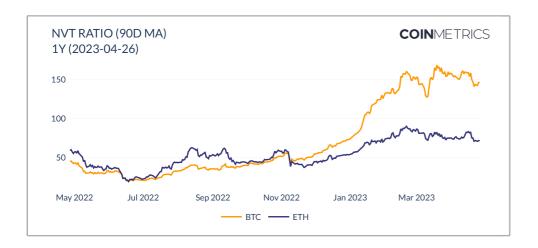




COINMETRICS



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	-6.12%	930,111	1,015,546	840,711
ETH	+15.90%	474,083	496,300	428,140
XRP	-14.98%	29,778	38,542	26,068
ADA	-13.37%	65,158	95,445	38,226
CRO	+60.46%	354	491	298
LINK	-7.86%	1,935	2,315	1,485
LTC	+0.28%	210,462	233,692	194,730
UNI	+41.27%	971	2,804	529
ВСН	-0.51%	34,213	60,860	29,259
FTT	-47.47%	115	158	83

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.07%	13,807,537	13,813,527	13,803,009
ETH	+0.70%	110,045,929	110,670,055	109,899,008
XRP	+0.19%	45,368,822,064	45,428,675,648	45,342,177,122
ADA	+0.01%	30,060,863,277	30,065,418,472	30,056,959,615
CRO	-0.00%	12,678,149,607	12,678,296,645	12,677,959,311
LINK	-0.01%	509,152,502	509,167,258	509,139,296
LTC	-0.66%	63,453,118	63,691,324	63,268,993
UNI	+0.37%	232,014,071	232,739,277	231,885,837
всн	+0.72%	13,040,002	13,123,796	13,023,429
FTT	+0.00%	317,267,550	317,267,550	317,267,550

COINMETRICS **ACTIVE ADDRESSES. 7 DAY TREND** BTC ETH XRP ADA **CRO** LINK LTC UNI ВСН FTT

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+45.89%	372,407	434,101	297,440
ETH	-8.89%	958,333	1,073,576	862,010
XRP	-4.81%	1,074,654	1,183,042	1,034,680
ADA	+13.75%	56,384	68,335	45,299
CRO	+87.09%	425	681	339
LINK	-1.22%	2,205	2,690	1,761
LTC	-0.49%	91,233	94,508	86,210
UNI	+54.14%	1,075	2,885	590
ВСН	+14.37%	10,646	12,658	9,010
FTT	-50.00%	157	229	110

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-10.00%	3,808,854,573	4,989,542,380	2,336,437,012
ETH	-14.19%	3,406,461,475	4,688,722,414	1,935,245,005
XRP	+11.33%	835,065,236	2,995,696,825	203,766,816
ADA	-6.92%	8,641,628,721	10,102,648,780	7,483,480,054
CRO	+79.24%	1,111,853	2,163,381	706,274
LINK	+1.80%	35,233,480	53,790,620	20,818,924
LTC	-3.67%	112,191,297	246,749,470	58,425,597
UNI	+3.63%	21,394,236	51,641,685	5,187,071
всн	+20.06%	15,054,762	20,525,170	11,943,235
FTT	-11.13%	4,868,043	18,658,440	1,193,542

ADDRESSES ≥	\$1M

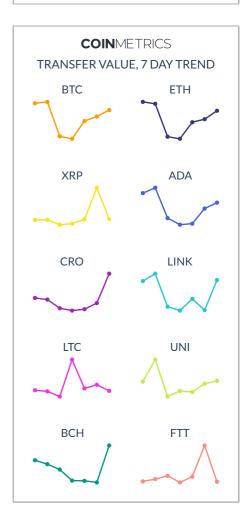
Count of addresses holding at least \$1 worth of native units

ADDRESSES ≥ \$1

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.27%	38,192,193	38,307,118	38,109,739
ETH	-0.71%	57,841,529	58,319,801	57,567,616
XRP	+0.14%	4,681,915	4,685,281	4,678,800
ADA	-1.72%	3,615,994	3,665,962	3,601,026
CRO	+0.29%	151,106	151,414	150,957
LINK	+0.02%	507,435	507,900	507,024
LTC	-0.22%	2,203,888	2,210,901	2,195,964
UNI	-0.80%	294,669	295,513	293,151
ВСН	-0.94%	3,997,460	4,015,431	3,977,817
FTT	-0.59%	21,149	21,217	21,091

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.05%	72,181	72,570	71,675
ETH	-3.29%	11,255	11,595	11,107
XRP	-1.42%	1,049	1,064	1,029
ADA	-0.18%	1,066	1,088	1,045
CRO	+1.64%	61	62	61
LINK	-7.22%	367	388	360
LTC	-1.43%	485	491	472
UNI	-1.38%	287	290	285
ВСН	-5.60%	230	232	219
FTT	-26.32%	17	19	14



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. <u>More information</u> 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 4/23/2023 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 4/23/2023 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</u> <u>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 <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.

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