STATE OF THE MARKET

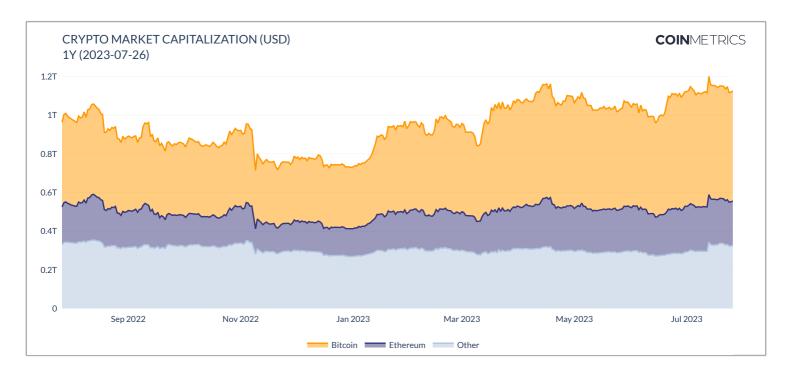
JULY 20 - 26, 2023

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



MARKET SUMMARY

Following last week's chain of announcements, this week also brought its fair share of eye-catching releases. Worldcoin, co-founded by OpenAI, launched its World ID project and accompanying token (WLD) at a fully-diluted valuation of \$22B. Obtaining a 'World ID' enables "proof of personhood" on the internet through cryptographic (zero-knowledge) proofs. However, in addition to controversy amongst the crypto community, regulatory scrutiny from the UK's data regulatory body has also emerged over privacy concerns and biometric data safety, just days after its release. Meanwhile, the Federal Reserve's launch of FedNow signifies a major upgrade to the existing financial payment infrastructure, introducing instant payments, settlement capabilities, and faster interbank transactions. Observers will closely monitor its adoption, with particular interest in its implications on stablecoins. Shifting focus to the world of Decentralized Finance (DeFi), lending protocol Atlendis secured a notable \$1 million loan from the French National Bank (BPI) after obtaining a crypto service provider license in alignment with MiCa regulations. The move demonstrates a growing integration of traditional financial institutions & assets with on-chain infrastructure. However, with increased innovation in this nascent space, several challenges remain. Notably, Era Lend, a DeFi protocol on ZkSync, suffered a \$3.4M exploit due to a re-entrancy attack, highlighting risks associated with smart contract vulnerabilities in decentralized finance. Amidst the broader digital asset market, Bitcoin's volatility, measured by Deribit's implied volatility index (DVOL), reached a two-year low, indicating a period of consolidation while the price of BTC continues to hover below the \$30k resistance level. Meanwhile, Twitter's rebrand to "X," signaling a shift to a "super-app," sparked speculation on various tokens, causing a 9% surge in Dogecoin upon news of its expansion into payments amongst other features. This week was also a momentous one on the macroeconomic front with the Federal Reserve raising rates by 0.25 percentage points amid the Q2 earnings season and signs of taming inflation. Market watchers are now anticipating decisions from the Bank of Japan and the ECB, expected to follow suit with a 25bps rate hike.

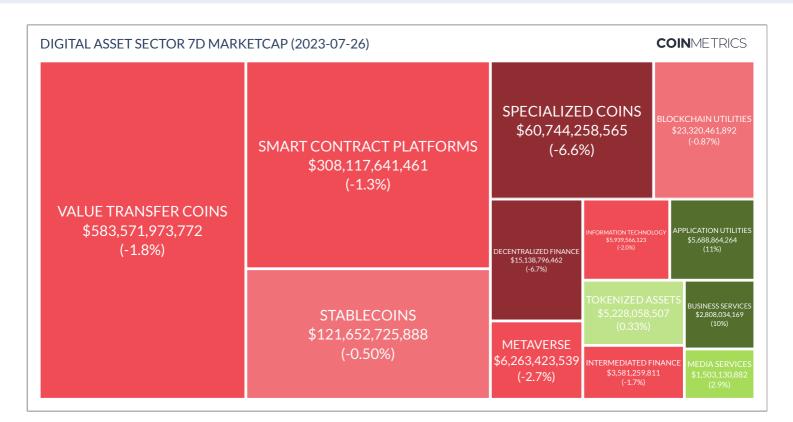


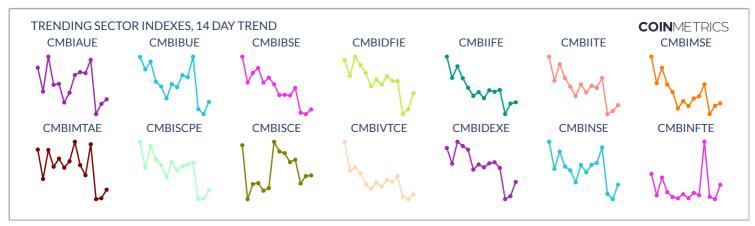
PRICE (CMBI CONSTITUENTS)

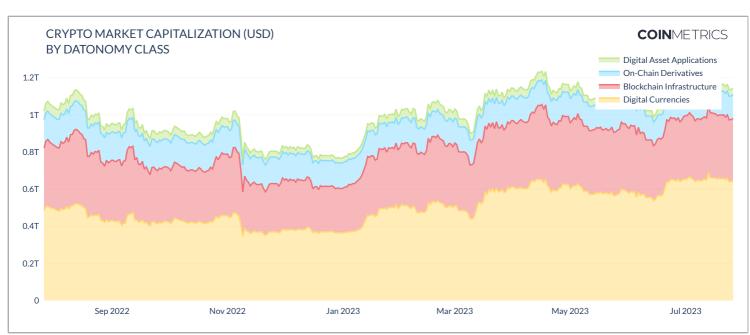
 $Coin \, Metrics' \, Reference \, Rate \, price \, calculated \, using \, a \, transparent, \, independent \, methodology \, robust \, to \, manipulation \, and \, derived \, from \, high \, quality \, constituent \, markets. \, Data \, based \, on \, 4pm \, EST \, NYC \, close. \, and \, constituent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

ASSET	CLOSING PRICE	14D CHANGE	14D MAX	14D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$29,360.58	-7.22%	\$31,644.02	\$29,118.21	+23.37%	\$31,644.02	\$15,799.60
ETH	\$1,871.15	-6.28%	\$1,996.45	\$1,849.15	+8.41%	\$2,129.88	\$1,103.83
SOL	\$25.24	-2.79%	\$27.95	\$23.22	-40.02%	\$46.47	\$8.35
DOT	\$5.24	-5.12%	\$5.53	\$5.14	-33.52%	\$9.54	\$4.27
ADA	\$0.31	-11.36%	\$0.35	\$0.30	-40.06%	\$0.57	\$0.24
DOGE	\$0.08	+11.57%	\$0.08	\$0.07	+12.03%	\$0.14	\$0.06
MATIC	\$0.72	-14.80%	\$0.85	\$0.71	-23.28%	\$1.52	\$0.59
BNB	\$238.61	-6.00%	\$253.85	\$237.44	-13.50%	\$353.50	\$228.54
AVAX	\$13.29	-5.53%	\$15.11	\$13.05	-44.69%	\$29.19	\$10.78
TRX	\$0.08	+0.40%	\$0.08	\$0.08	+17.47%	\$0.08	\$0.05
CMBI10	\$3,089.51	-6.66%	\$3,309.83	\$3,057.92	+10.60%	\$3,398.54	\$1,838.40

ASSET CLASSES





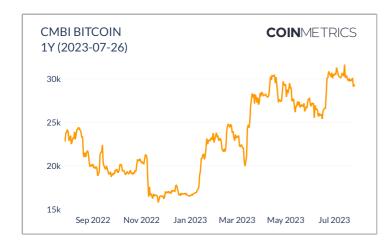


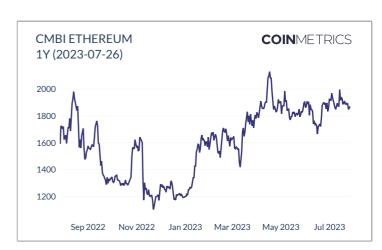
INDEX ROUNDUP

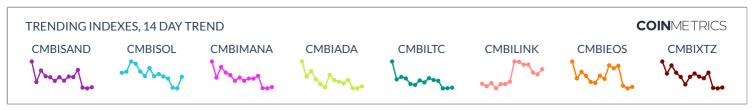
SINGLE ASSET INDEXES

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	14D CHANGE	14D MAX	14D MIN	52W CHANGE	52W MAX	52W MIN
СМВІВТС	\$29,360.58	-7.22%	\$31,644.02	\$29,118.21	+23.37%	\$31,644.02	\$15,799.60
СМВІВТСТ	\$31,544.66	-7.22%	\$33,997.97	\$31,284.26	+23.37%	\$33,997.97	\$16,974.91
СМВІЕТН	\$1,871.15	-6.28%	\$1,996.45	\$1,849.15	+8.41%	\$2,129.88	\$1,103.83
СМВІЕТНТ	\$2,031.30	-6.28%	\$2,167.33	\$2,007.42	+8.41%	\$2,312.19	\$1,198.31



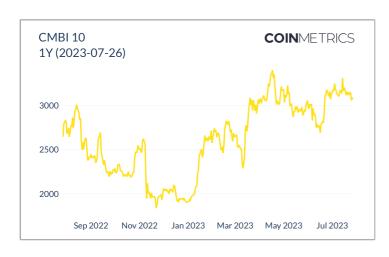




MULTI ASSET INDEXES

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

INDEX	CLOSING PRICE	14D CHANGE	14D MAX	14D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$3,089.51	-6.66%	\$3,309.83	\$3,057.92	+10.60%	\$3,398.54	\$1,838.40
CMBI10E	\$4,732.31	-4.88%	\$4,984.42	\$4,640.03	-22.11%	\$6,768.61	\$3,409.70
CMBI10EX	\$6,702.39	-5.85%	\$7,118.76	\$6,615.09	-4.25%	\$7,991.44	\$4,562.49
CMBI10M	\$10,330.20	-1.74%	\$10,671.70	\$10,135.79	-31.31%	\$16,183.43	\$9,310.27
CMBIBE	\$15,095.86	-6.88%	\$16,210.93	\$14,952.13	+17.87%	\$16,210.93	\$8,387.96





MARKET MOVEMENT

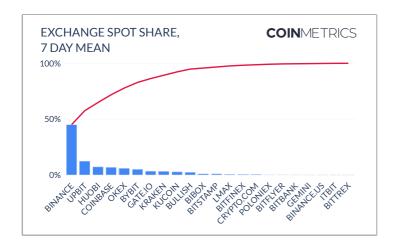
TRADING DIARY, 7 DAY

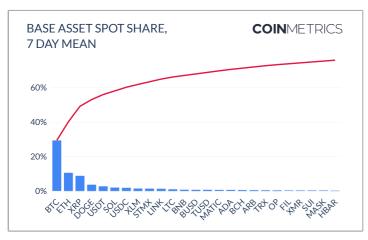
ADVANCING VOLUME \$19,261,512,306

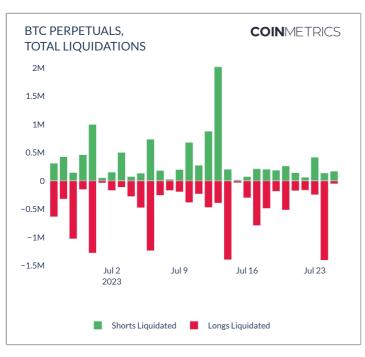
DECLINING VOLUME \$80,665,867,623

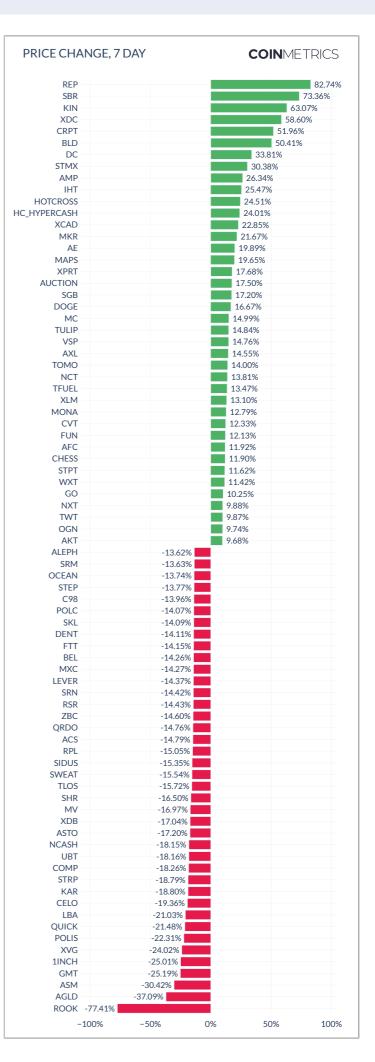
ADVANCING COUNT 138

DECLINING COUNT 504

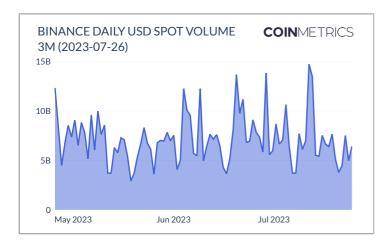


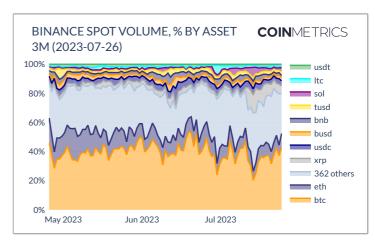


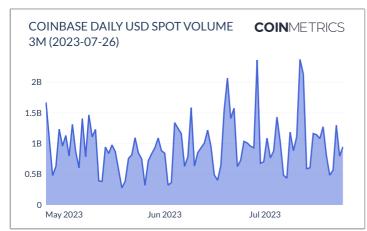


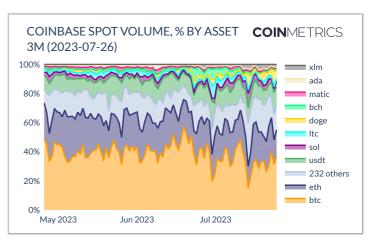


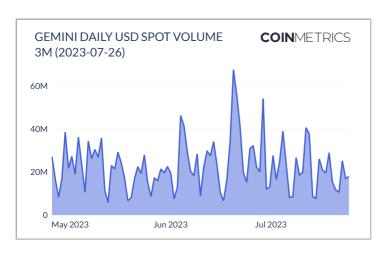
EXCHANGE SPOT VOLUME

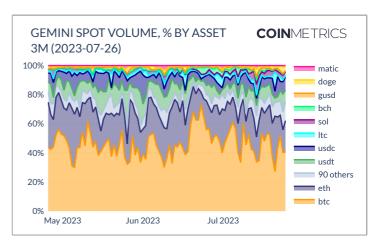


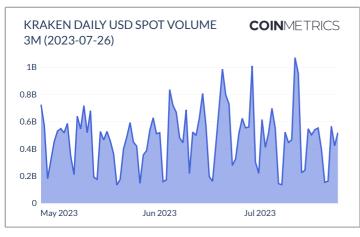


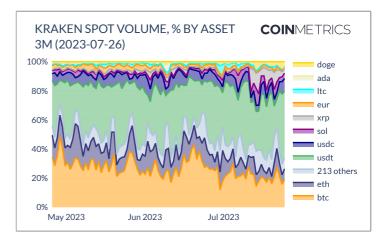




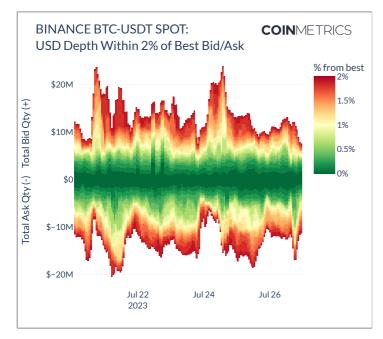


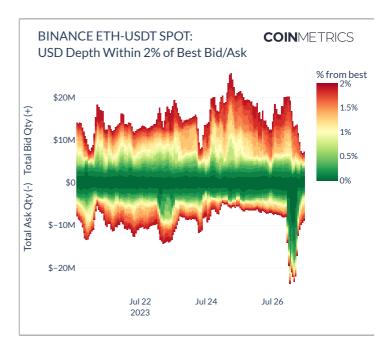


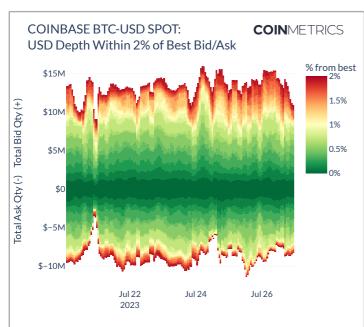


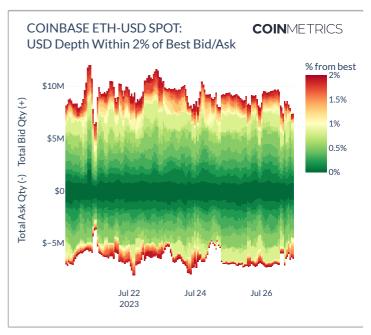


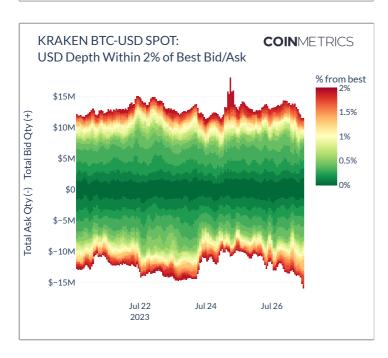
ORDER BOOK DEPTH

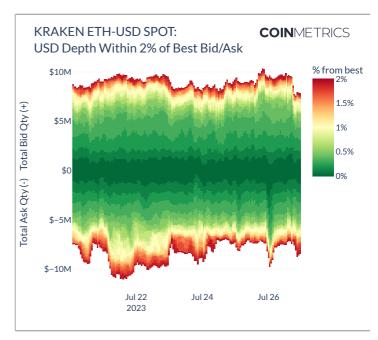




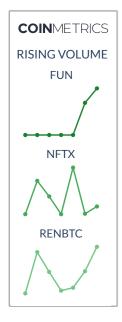


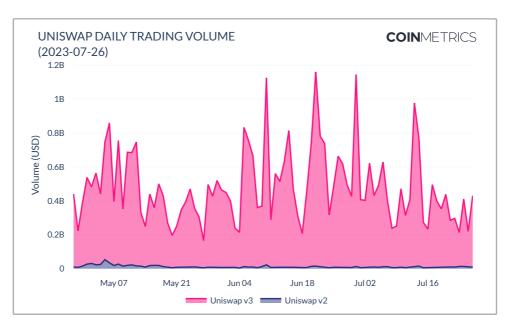




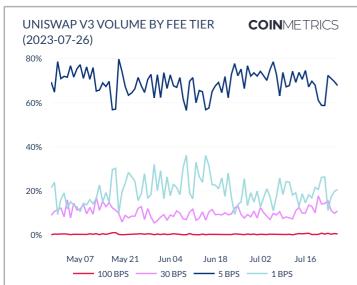


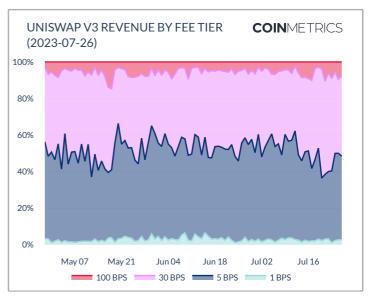
DEX DIGEST

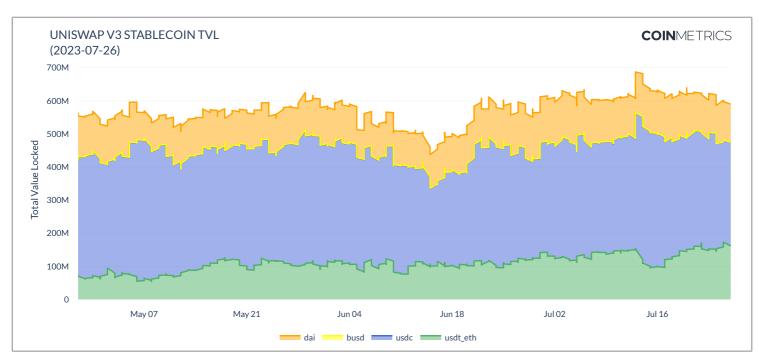






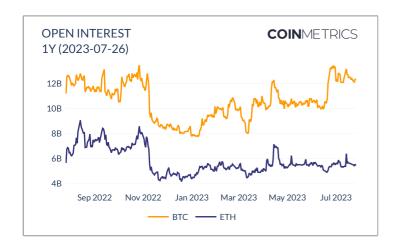


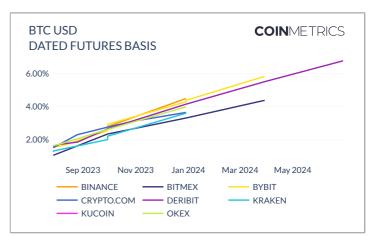




Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

FUTURES FEED





OPEN INTEREST

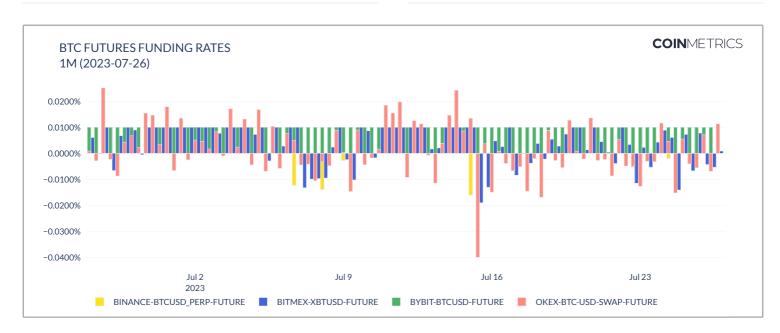
 $Sum \ of \ all \ reported \ open \ interest \ from \ futures \ markets \ in \ USD$

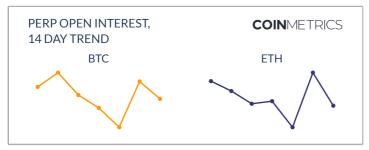
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.10%	12,273,567,130	12,397,611,700	12,128,554,316
ETH	-2.04%	5,513,244,353	5,580,423,611	5,416,228,118
XRP	-24.78%	777,001,250	946,443,537	699,601,428
ADA	-1.07%	116,927,790	120,515,334	115,295,809
LINK	+44.69%	201,391,668	273,573,190	112,154,980
LTC	-1.61%	434,825,406	443,637,769	427,439,346
CRO	-2.98%	4,417,636	4,702,600	4,139,571
UNI	+1.79%	44,711,542	50,290,296	42,051,079
ВСН	-8.21%	291,228,298	308,409,411	276,163,748

FUTURES VOLUME

USD value of all reported futures volume

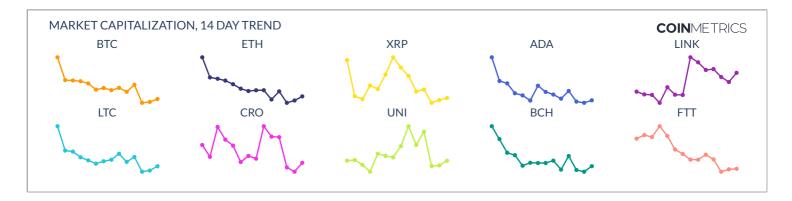
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-24.95%	18,683,881,501	29,597,319,383	8,813,431,297
ETH	-27.01%	8,738,532,337	13,531,844,663	5,862,111,965
XRP	-53.30%	3,497,346,826	6,147,411,549	2,457,631,401
ADA	-48.09%	318,418,449	610,993,808	202,473,367
LINK	-80.09%	1,261,170,640	3,567,337,863	444,439,824
LTC	-18.98%	846,377,261	1,165,837,838	571,530,842
CRO	+136.67%	2,290,045	5,203,939	686,109
UNI	-44.39%	149,682,306	278,816,308	78,078,670
ВСН	-16.15%	925,772,295	1,235,980,888	492,163,256







MARKET CAPITALIZATION



MARKET CAP

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

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	-6.54%	582,271,157,395	610,728,166,020	567,172,583,836
ETH	-6.48%	233,089,064,789	245,507,229,526	226,969,365,121
XRP	-12.01%	74,979,215,408	82,070,016,635	70,335,813,871
ADA	-13.54%	10,858,108,801	12,156,046,487	10,415,312,960
LINK	+10.14%	7,396,233,635	8,341,336,081	6,615,660,358
LTC	-10.71%	6,820,483,370	7,454,649,295	6,546,350,598
CRO	-1.60%	5,979,538,153	6,105,323,245	5,859,187,559
UNI	-0.01%	5,907,076,277	6,215,103,951	5,722,638,289
ВСН	-11.59%	4,819,942,162	5,321,381,710	4,619,268,992
FTT	-12.97%	485,233,524	540,755,434	440,461,300

FII -12.77% 4

REALIZED CAP

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

	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	+0.13%	397,252,148,326	397,471,124,348	396,963,354,626
ETH	-1.42%	162,993,793,886	164,458,557,273	162,006,697,052
XRP	+0.95%	52,566,882,774	53,135,080,556	51,782,988,795
ADA	-1.72%	16,529,753,119	16,687,575,433	16,400,245,978
LINK	+2.28%	8,222,596,661	8,312,866,253	8,103,668,046
LTC	-0.13%	6,956,035,250	6,962,610,674	6,951,490,454
CRO	+0.02%	22,422,935,816	22,425,309,820	22,420,547,564
UNI	+0.31%	8,459,212,807	8,476,696,941	8,437,874,521
ВСН	-0.44%	4,744,134,339	4,758,289,837	4,733,260,018
FTT	-0.19%	852,821,078	854,132,024	851,766,790

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	-6.61%	412,412,309,471	432,720,887,666	401,611,025,591
ETH	-6.52%	208,555,198,433	219,610,728,958	203,035,599,564
XRP	-11.92%	34,815,358,941	38,125,701,723	32,676,344,432
ADA	-13.02%	9,649,835,678	10,769,262,197	9,285,370,213
LINK	+10.12%	3,898,014,802	4,396,314,739	3,486,801,306
LTC	-10.78%	5,877,862,794	6,426,036,750	5,639,906,584
CRO	-1.61%	663,803,823	677,763,231	650,431,557
UNI	+0.02%	1,459,646,678	1,535,890,687	1,413,825,274
ВСН	-11.62%	3,253,415,654	3,592,314,738	3,117,284,047
FTT	-12.97%	485,233,524	540,755,434	440,461,300

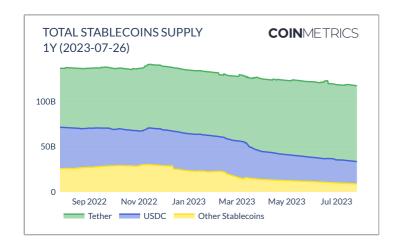
MARKET VALUE TO REALIZED VALUE

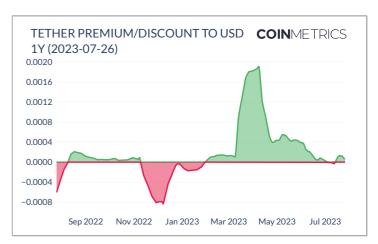
The ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	-6.66%	1.47	1.54	1.43
ETH	-5.14%	1.43	1.49	1.40
XRP	-12.84%	1.43	1.56	1.34
ADA	-12.02%	0.66	0.73	0.63
LINK	+7.69%	0.90	1.01	0.81
LTC	-10.60%	0.98	1.07	0.94
CRO	-1.63%	0.27	0.27	0.26
UNI	-0.32%	0.70	0.73	0.68
ВСН	-11.20%	1.02	1.12	0.98
FTT	-12.80%	0.57	0.63	0.52



STABLECOINS REPORT





MARKET CAPITALIZATION

USD value of current supply

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
USDT_ETH	-0.04%	39,032,730,253	39,048,213,986	39,021,926,915
USDT	-0.03%	888,108,954	888,449,194	887,885,722
USDT_TRX	-0.03%	44,035,910,496	44,052,780,938	44,024,841,779
PAX	-3.21%	554,538,124	565,011,079	546,890,305
DAI	-2.27%	4,245,002,253	4,281,951,114	4,181,213,971
USDC	-3.42%	25,144,843,570	25,554,102,366	24,680,173,333
BUSD	-5.03%	3,884,187,882	3,974,195,446	3,774,197,593
GUSD	-26.64%	488,635,630	564,346,348	412,733,004

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
USDT_ETH	-21.69%	2,618,018,653	3,920,859,865	1,023,384,411
USDT	-14.74%	524,729	4,404,267	13,862
USDT_TRX	-8.67%	9,094,303,578	11,100,885,720	4,592,987,154
PAX	-91.00%	26,046,169	108,134,194	648,700
DAI	+121.63%	688,046,947	1,640,194,071	160,331,924
USDC	-49.07%	3,636,336,740	6,275,317,075	1,255,665,547
BUSD	+32.41%	68,131,563	285,296,930	3,682,232
GUSD	-35.17%	41,110,198	152,312,752	376,753





TRANSACTION COUNT

Count of transactions

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
USDT_ETH	-10.46%	93,931	114,943	68,159
USDT	+26.32%	42	205	14
USDT_TRX	+4.21%	1,751,158	1,927,966	1,335,543
PAX	-26.32%	81	147	49
DAI	-8.69%	3,666	4,716	2,848
USDC	-8.86%	39,884	51,779	29,003
BUSD	-27.11%	548	762	397
GUSD	-6.76%	66	92	32

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

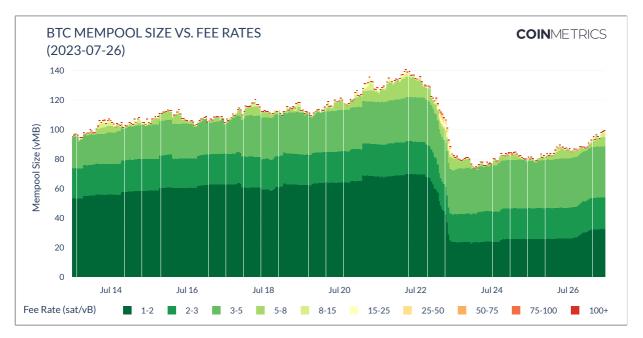
ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
USDT_ETH	-8.56%	744	947	516
USDT	-64.29%	462	2,001	83
USDT_TRX	-1.57%	235	342	192
PAX	-40.46%	19,727	162,722	1,243
DAI	-17.31%	1,426	2,178	963
USDC	-55.61%	940	1,500	477
BUSD	-25.91%	700	1,007	334
GUSD	-68.39%	6,137	23,546	729

VELOCITY

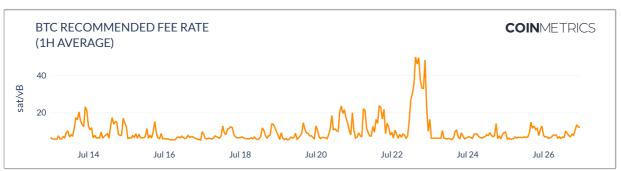
Number of times that an average native unit among the active supply has been transferred in the past 1 year

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
USDT_ETH	+0.33%	35.61	35.67	35.56
USDT	-9.75%	37.58	41.18	35.14
USDT_TRX	+1.55%	66.86	67.38	66.36
PAX	+3.67%	32.01	32.53	31.37
DAI	-3.12%	257.59	262.15	253.03
USDC	+2.09%	128.33	129.69	127.03
BUSD	+4.66%	66.60	68.48	65.03
GUSD	+50.04%	11.22	13.66	9.01

FEE MARKET

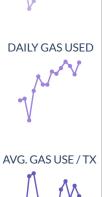


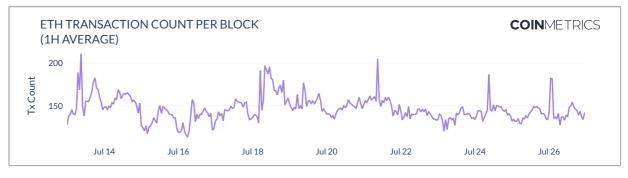


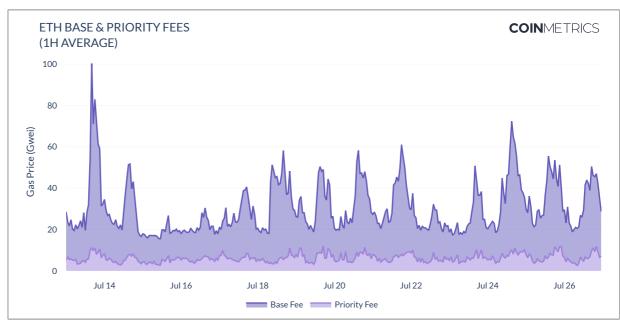












NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	+16.10%	936,480	1,028,951	855,163
ETH	-7.07%	451,096	512,710	389,260
XRP	-41.17%	39,812	65,204	27,537
ADA	-23.76%	55,698	72,346	45,581
LINK	-31.54%	3,571	6,818	2,221
LTC	+27.69%	237,374	301,243	213,469
CRO	-23.54%	365	830	247
UNI	-45.06%	995	1,784	623
ВСН	+34.70%	55,238	119,167	27,879
FTT	-54.40%	120	193	70

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	-0.01%	13,764,839	13,766,305	13,763,654
ETH	+0.02%	109,751,235	109,794,778	109,694,669
XRP	+0.11%	46,428,057,820	46,453,244,850	46,394,898,027
ADA	+0.71%	30,448,953,825	30,562,923,194	30,333,366,137
LINK	-0.02%	527,027,797	527,055,162	526,939,609
LTC	+0.06%	63,258,099	63,275,168	63,234,106
CRO	-0.00%	11,101,255,041	11,101,491,071	11,101,051,637
UNI	+0.03%	247,101,044	247,124,680	247,041,298
ВСН	+0.03%	13,130,855	13,132,959	13,128,639
FTT	+0.00%	328,895,104	328,895,104	328,895,104

COINMETRICS ACTIVE ADDRESSES, 14 DAY TREND BTC ETH XRP ADA LINK LTC CRO UNI BCH FTT

TRANSACTION COUNT

Count of transactions

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	+20.89%	455,982	591,972	288,229
ETH	-8.20%	1,045,227	1,175,963	946,750
XRP	-36.54%	1,150,963	1,403,711	879,664
ADA	-22.88%	74,418	89,159	64,898
LINK	-23.74%	4,834	10,336	2,379
LTC	+50.00%	125,395	187,022	106,763
CRO	-21.96%	409	877	244
UNI	-51.40%	1,333	2,258	696
всн	+205.80%	37,348	119,221	12,501
FTT	-70.76%	149	277	81

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

14D CHANGE	14D AVERAGE	14D MAX	14D MIN
-46.26%	3,607,122,653	6,292,155,642	2,111,633,990
-39.95%	2,611,754,653	4,720,430,005	1,275,005,604
-79.68%	1,191,681,467	6,317,776,627	240,426,130
-48.10%	9,338,392,819	13,329,953,219	6,918,454,917
-45.83%	114,720,508	316,964,441	42,624,700
-54.00%	89,135,194	155,335,521	54,578,277
-86.01%	1,339,606	4,695,004	404,483
-90.73%	41,391,975	255,035,136	7,256,739
-68.84%	57,407,769	132,425,890	22,697,741
-81.74%	1,735,598	4,322,057	524,396
	-46.26% -39.95% -79.68% -48.10% -45.83% -54.00% -86.01% -90.73%	-46.26% 3,607,122,653 -39.95% 2,611,754,653 -79.68% 1,191,681,467 -48.10% 9,338,392,819 -45.83% 114,720,508 -54.00% 89,135,194 -86.01% 1,339,606 -90.73% 41,391,975 -68.84% 57,407,769	-46.26% 3,607,122,653 6,292,155,642 -39.95% 2,611,754,653 4,720,430,005 -79.68% 1,191,681,467 6,317,776,627 -48.10% 9,338,392,819 13,329,953,219 -45.83% 114,720,508 316,964,441 -54.00% 89,135,194 155,335,521 -86.01% 1,339,606 4,695,004 -90.73% 41,391,975 255,035,136 -68.84% 57,407,769 132,425,890

ADDRESSES ≥ \$1

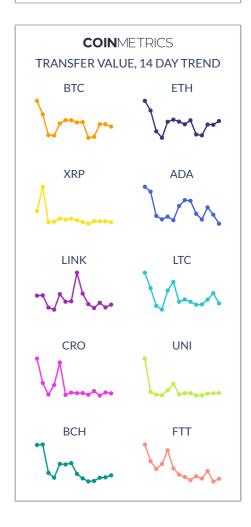
Count of addresses holding at least \$1 worth of native units

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	+0.19%	40,377,013	40,515,373	40,262,325
ETH	-1.35%	60,793,325	61,575,606	60,476,808
XRP	+0.58%	4,711,190	4,723,228	4,695,878
ADA	-1.59%	3,584,512	3,634,996	3,571,730
LINK	+1.43%	522,274	526,075	518,642
LTC	-6.04%	2,391,396	2,537,192	2,368,727
CRO	-0.33%	150,413	150,946	150,112
UNI	+0.90%	283,438	284,723	282,139
ВСН	-2.84%	4,622,134	4,730,293	4,577,911
FTT	-0.38%	21,643	21,777	21,551

ADDRESSES ≥ \$1M

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

ASSET	14D CHANGE	14D AVERAGE	14D MAX	14D MIN
втс	-2.48%	74,148	75,481	73,498
ETH	-8.95%	10,835	11,723	10,574
XRP	-9.01%	1,529	1,631	1,465
ADA	-14.57%	879	995	846
LINK	+16.58%	402	451	355
LTC	-16.42%	519	597	498
CRO	+2.04%	50	52	48
UNI	+0.00%	322	325	319
ВСН	-13.02%	369	407	347
FTT	-6.67%	14	16	13



DATA EXPLAINER (P.1)

ESTIMATED MARKET CAPITALIZATION (MARKET CAP)

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

PRICE

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

DIGITAL ASSET TAXONOMY

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

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

Sector describes specialization of an asset within a class.

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

datonomy™ offers a new level of transparency into how the market is moving and serves as a powerful foundation for portfolio performance measurement, risk management, reporting, & investment strategy. <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[™], 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
- CMBIJFE: 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 7/23/2023 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 7/23/2023 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-overweek 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-overweek decline in volume. The subset of liquidity pools where both the base and the quote asset have a Coin Metrics Reference Rate are included.

DATA EXPLAINER (P.3)

DEX VOLUME BY FEE TIER

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

DEX TOTAL VALUE LOCKED (TVL)

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

FUTURES OPEN INTEREST

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

FUTURES BASIS

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

FUTURES VOLUME

The reported futures volume from the markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset. Covered markets can be found in the Coin Metrics <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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