STATE OF THE MARKET

JUNE 15 - 21, 2023

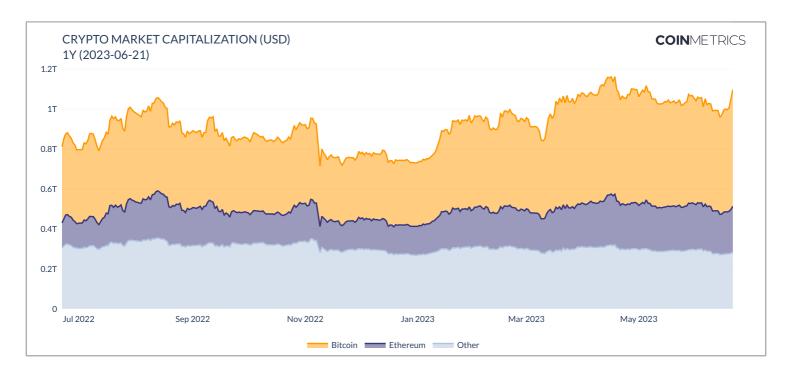
Coin Metrics' State of the Market provides an overview of cryptoasset market activity



COINMETRICS

MARKET SUMMARY

In an intriguing narrative shift, institutional interest in Bitcoin is surging back, spurred by the largest asset manager in the world, BlackRock, filing an application with the SEC to issue a spot Bitcoin ETF. With \$9 trillion of assets under management (AUM), financial giant BlackRock's bid represents a new push to bring a longawaited and desired spot Bitcoin ETF to the U.S. financial markets. The proposed ETF would fall under the company's iShares unit and be called the iShares Bitcoin Trust. Not to be confused by the "trust" in its name, it would operate with the full convenience of a spot ETF, not unlike physical gold-holding ETF offerings such as State Street's SPDR Gold Trust (GLD). In the filing, BlackRock indicated that Coinbase would function as the custodian, a win for the company—especially when faced with the possibility of losing some exchange trading volume to a lower-fee spot ETF product. While the SEC has approved ETFs holding Bitcoin futures contracts, the U.S. regulator has repeatedly rejected a Bitcoin spot ETF over the last few years. But BlackRock's track record of succeeding in 575 of 576 ETF applications has given digital asset participants new confidence that its filing carries significant weight. In response to the news, Grayscale's Bitcoin Trust (GBTC), currently trapped at a discount to NAV, saw the gap start to close in the wake of BlackRock's filing, with markets finding new hope that its product could finally be converted to an ETF. A slew of other institutions also reaffirmed their digital asset market efforts. On June 20th, EDX Markets, an institutional crypto exchange backed by the likes of Citadel, Fidelity, and Charles Schwab, went live after being announced in September 2022. On the back of the BlackRock filing, past ETF filers sprung back to action including WisdomTree, Invesco, and Valkyrie. In yet another sign of TradFi's latest push into the market, Deutsche Bank applied for a Digital Asset License in Germany, as the bank is moving to build on its digital asset and custody business. With headlines flashing household names, the crypto markets responded strongly, with BTC rising back to \$30K by Wednesday afternoon. In political news, the U.S. House Financial Services Committee announced it will vote on crypto legislation in July. The Bitcoin-friendly Mayor of Miami, Francis Suarez, also threw his name into the growing field of Republicans vying for the Presidential nomination. And in a sign of crypto's ever-global influence, U.S. crypto exchange Gemini plans to expand abroad, including in Singapore and India. While Bitcoin enjoyed the week's spotlight, there were also a few notable developments in the Ethereum ecosystem. In the increasingly prolific staking ecosystem, Ethereum developers discussed raising the maximum stake amount from 32 to 2,048 ETH, as larger staking services continue to attract capital. Finally, in an auction at Sotheby's, generative & digital artist Dmitri Cerniak's Art Blocks piece nicknamed "The Goose" fetched \$6.2M-suggesting crypto art's grails may have longevity in spite of a broader NFT downturn. BlackRock's high-stakes filing has breathed new life into the institutional landscape of the digital asset market, and participants will surely be watching for the SEC's response.

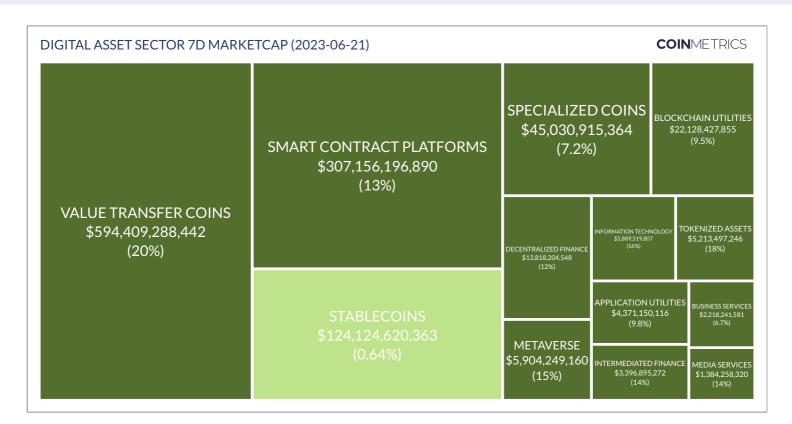


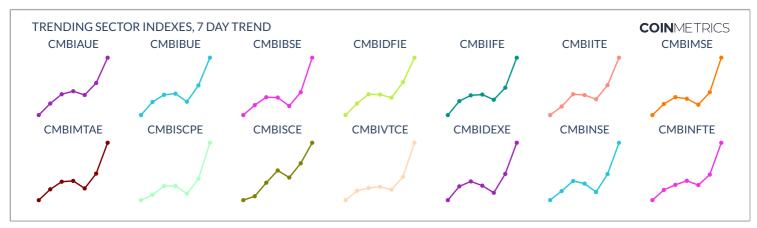
PRICE (CMBI CONSTITUENTS)

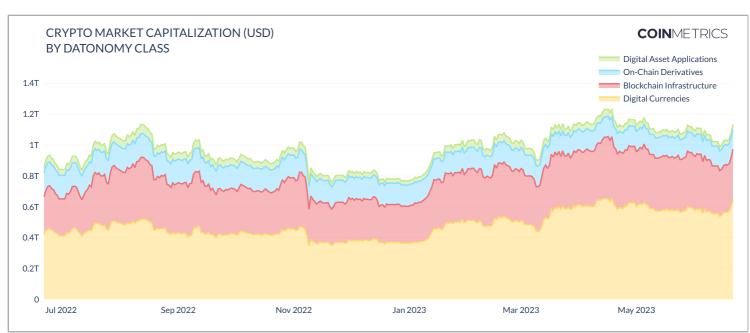
Coin Metrics' Reference Rate price calculated using a transparent, independent methodology robust to manipulation and derived from high quality constituent markets. Data based on 4pm EST NYC close.

ASSET	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
втс	\$30,072.63	+18.39%	\$30,072.63	\$25,402.23	+44.79%	\$30,475.40	\$15,799.60
ЕТН	\$1,877.31	+12.74%	\$1,877.31	\$1,665.21	+67.62%	\$2,129.88	\$1,017.22
SOL	\$17.09	+16.11%	\$17.09	\$14.72	-54.30%	\$46.47	\$8.35
DOT	\$4.80	+9.36%	\$4.80	\$4.39	-37.45%	\$9.54	\$4.27
ADA	\$0.28	+9.05%	\$0.28	\$0.26	-39.74%	\$0.57	\$0.24
DOGE	\$0.07	+6.76%	\$0.07	\$0.06	+3.62%	\$0.14	\$0.06
MATIC	\$0.66	+11.93%	\$0.66	\$0.59	+25.68%	\$1.52	\$0.44
TRX	\$0.07	+1.47%	\$0.07	\$0.07	+14.62%	\$0.08	\$0.05
BNB	\$248.53	+5.20%	\$248.53	\$236.26	+9.21%	\$353.50	\$211.98
AVAX	\$12.86	+12.55%	\$12.86	\$11.38	-27.60%	\$29.19	\$10.78
CMBI10	\$3,110.77	+15.53%	\$3,110.77	\$2,692.67	+38.73%	\$3,398.54	\$1,838.40

ASSET CLASSES





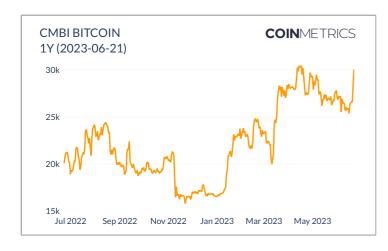


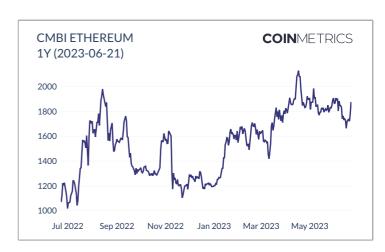
INDEX ROUNDUP

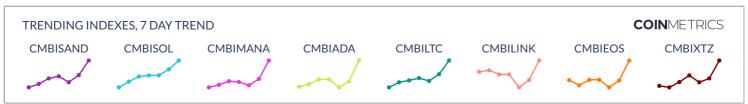
SINGLE ASSET INDEXES

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	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
СМВІВТС	\$30,072.63	+18.39%	\$30,072.63	\$25,402.23	+44.79%	\$30,475.40	\$15,799.60
СМВІВТСТ	\$32,309.69	+18.39%	\$32,309.69	\$27,291.86	+44.79%	\$32,742.41	\$16,974.91
СМВІЕТН	\$1,877.31	+12.74%	\$1,877.31	\$1,665.21	+67.62%	\$2,129.88	\$1,017.22
СМВІЕТНТ	\$2,038.00	+12.74%	\$2,038.00	\$1,807.74	+67.62%	\$2,312.19	\$1,104.29



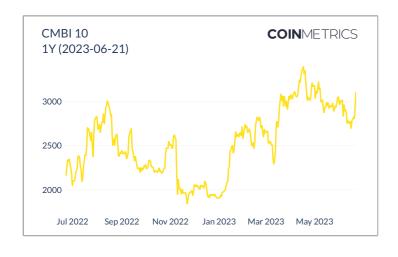




MULTI ASSET INDEXES

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

INDEX	CLOSING PRICE	7D CHANGE	7D MAX	7D MIN	52W CHANGE	52W MAX	52W MIN
CMBI10	\$3,110.77	+15.53%	\$3,110.77	\$2,692.67	+38.73%	\$3,398.54	\$1,838.40
CMBI10E	\$4,300.27	+10.28%	\$4,300.27	\$3,899.33	-15.85%	\$6,768.61	\$3,409.70
CMBI10EX	\$6,581.99	+11.41%	\$6,581.99	\$5,907.83	+31.34%	\$7,991.44	\$4,562.49
CMBI10M	\$9,812.75	+0.00%	\$9,812.75	\$9,812.75	-38.84%	\$16,183.43	\$9,310.27
CMBIBE	\$15,350.13	+16.42%	\$15,350.13	\$13,184.77	+51.17%	\$16,180.78	\$8,387.96





MARKET MOVEMENT

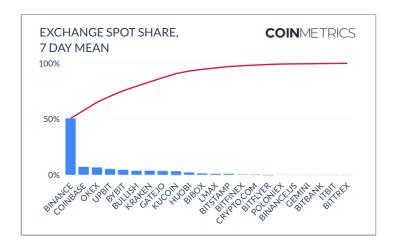
TRADING DIARY, 7 DAY

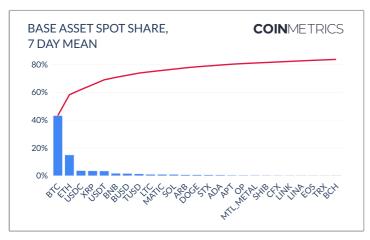
ADVANCING VOLUME \$100,039,497,007

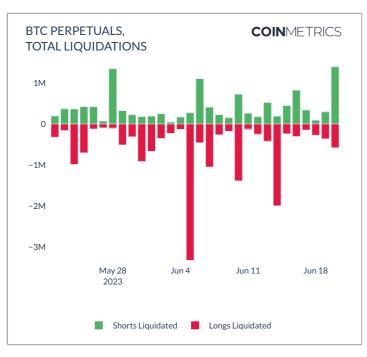
DECLINING VOLUME \$9,387,445,839

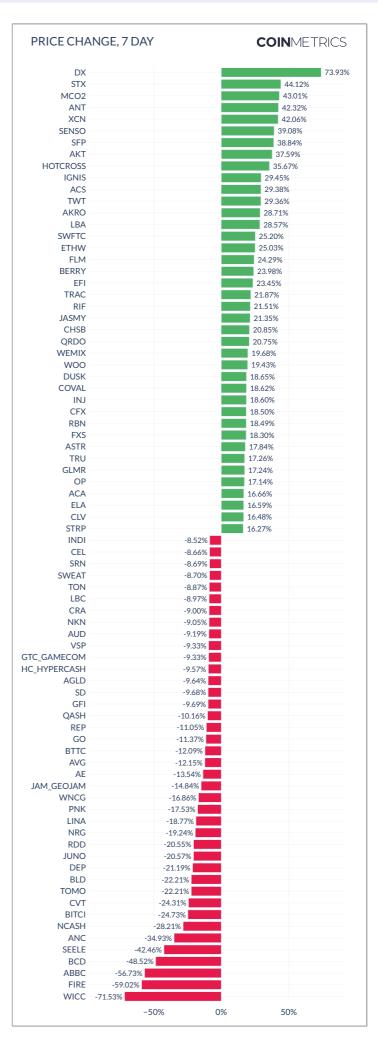
ADVANCES 480

DECLINES 165

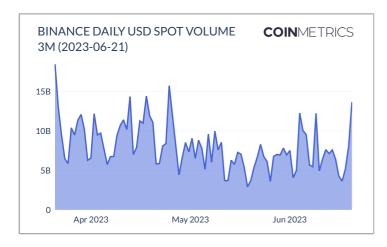


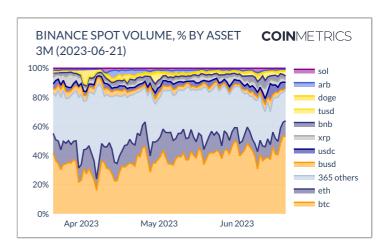


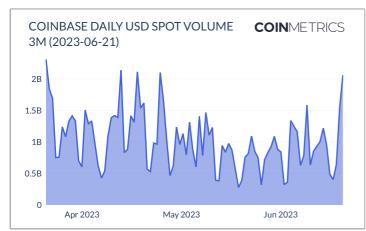


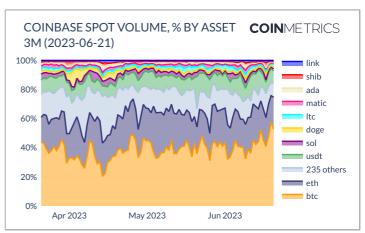


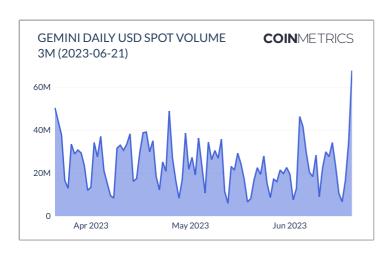
EXCHANGE SPOT VOLUME

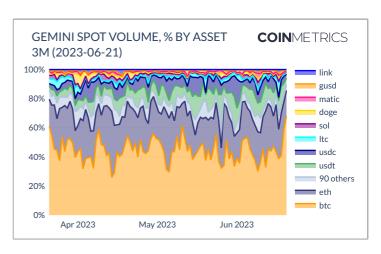


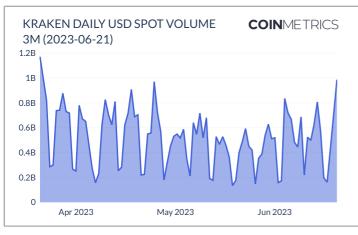


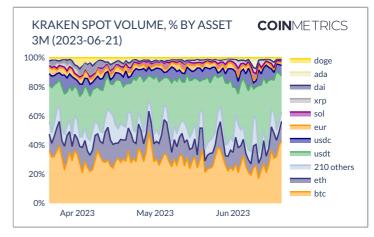




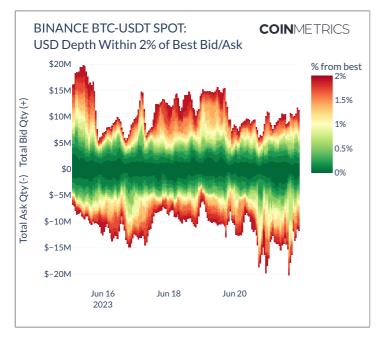


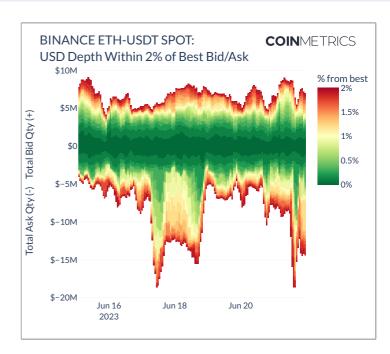


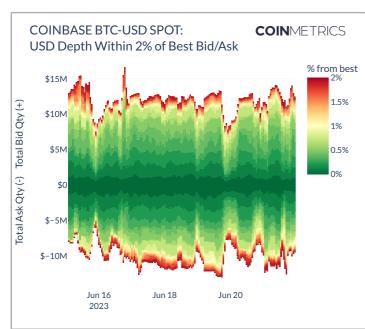


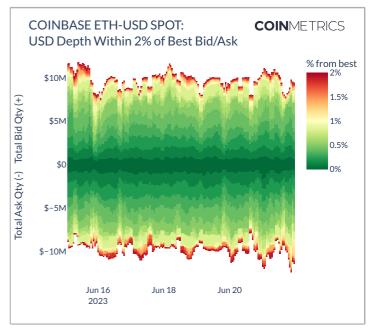


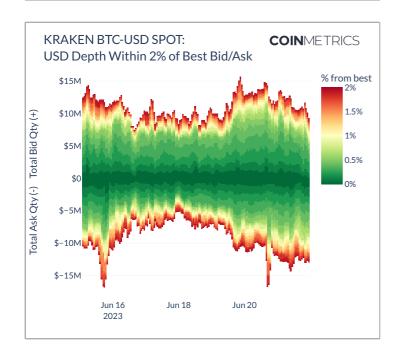
ORDER BOOK DEPTH

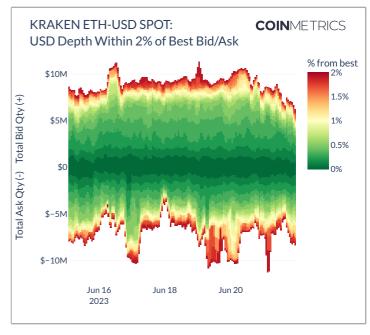






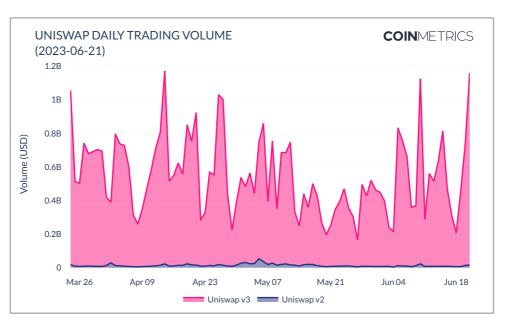




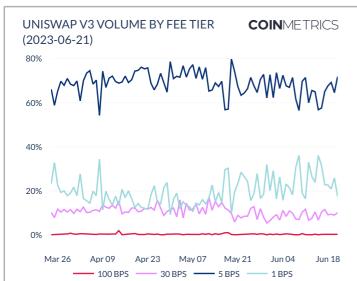


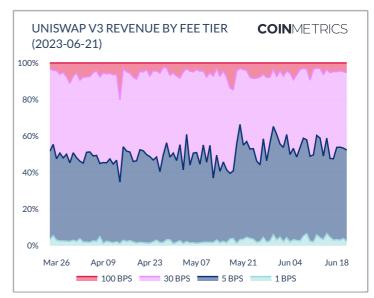
DEX DIGEST

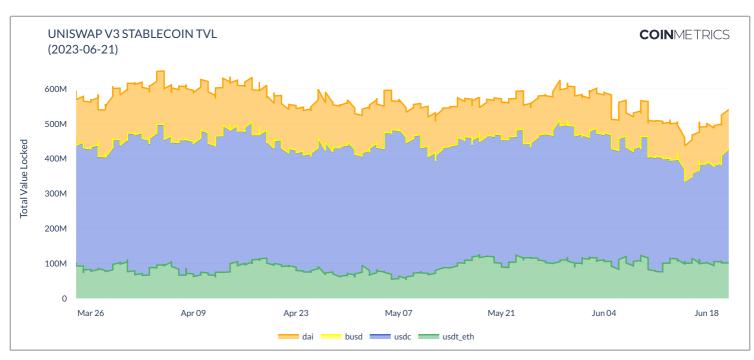






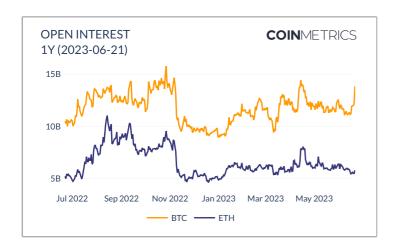


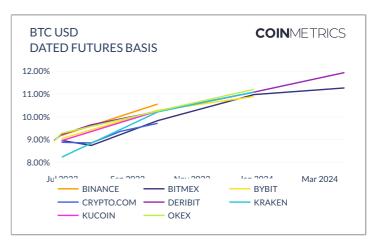




Note: DEX metrics currently capture a subset of the top liquidity pools on the Ethereum-based instantiation of each protocol.

FUTURES FEED





OPEN INTEREST

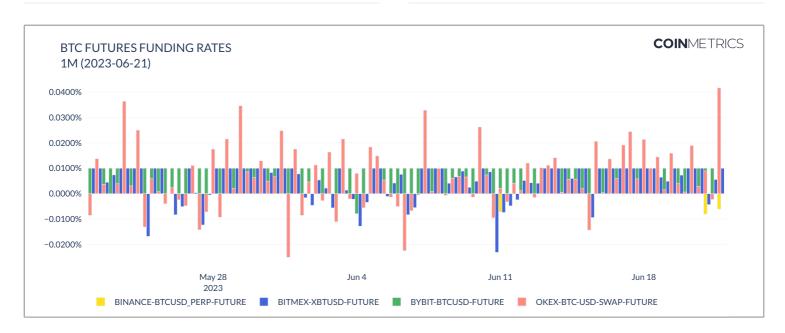
 $Sum \ of \ all \ reported \ open \ interest \ from \ futures \ markets \ in \ USD$

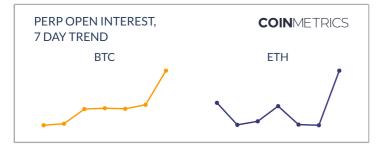
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+24.10%	12,036,071,181	13,828,744,106	11,143,440,121
ETH	+3.84%	5,560,632,198	5,795,976,983	5,451,678,922
XRP	+0.88%	625,050,880	643,911,397	613,142,958
ADA	+10.85%	155,503,981	165,693,361	149,476,427
LTC	+6.82%	375,812,226	392,406,705	361,165,884
CRO	+8.09%	3,722,027	3,936,502	3,619,209
LINK	+17.90%	76,723,132	83,035,162	70,430,633
UNI	-18.65%	33,257,513	37,338,347	30,375,876
всн	+16.18%	108,778,323	116,067,704	96,957,479

FUTURES VOLUME

USD value of all reported futures volume

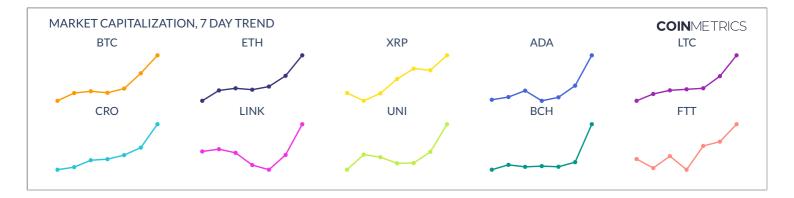
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+185.90%	34,787,310,708	78,114,406,486	14,099,593,189
ETH	+91.77%	14,400,573,527	26,809,255,917	7,161,377,334
XRP	-1.56%	1,304,967,777	1,625,619,077	862,330,458
ADA	+24.90%	424,555,846	671,982,145	284,275,003
LTC	+135.21%	743,331,613	1,631,595,196	433,563,416
CRO	+90.25%	1,683,772	3,033,322	1,176,446
LINK	+15.53%	223,764,759	293,909,243	161,920,733
UNI	-54.80%	108,477,435	248,470,635	62,476,294
ВСН	+1,446.83%	273,127,550	1,460,929,885	52,211,750







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	+17.80%	526,571,287,844	584,182,850,883	495,926,918,720
ETH	+14.01%	214,023,682,372	231,891,470,111	203,397,948,475
XRP	+4.54%	48,675,770,822	50,102,786,700	47,478,683,931
ADA	+10.02%	9,147,228,536	9,836,922,478	8,919,353,690
LTC	+14.60%	5,719,795,114	6,236,165,086	5,441,693,791
CRO	+7.61%	5,390,161,226	5,658,621,005	5,258,595,325
LINK	+5.12%	5,285,045,579	5,566,122,717	5,113,717,265
UNI	+8.19%	4,541,872,113	4,785,736,037	4,423,449,086
ВСН	+30.17%	2,161,463,002	2,645,081,374	2,032,026,001
FTT	+6.27%	302,609,592	317,621,596	293,139,811

REALIZED CAP

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.23%	392,048,435,067	392,678,295,610	391,790,955,287
ETH	+1.69%	161,623,505,089	163,379,380,675	160,667,134,450
XRP	+0.14%	49,891,218,392	49,977,078,712	49,822,989,356
ADA	-4.73%	17,112,571,363	17,259,914,046	16,443,603,955
LTC	+0.01%	6,903,871,574	6,906,508,197	6,902,679,170
CRO	+0.15%	22,384,040,591	22,411,926,161	22,378,573,513
LINK	-1.36%	7,953,442,545	8,047,821,273	7,924,216,862
UNI	+0.15%	8,610,532,020	8,617,689,991	8,604,436,248
ВСН	+0.43%	4,254,927,052	4,270,167,099	4,252,022,150
FTT	-0.03%	880,552,996	881,092,700	880,165,066

FREE FLOAT MARKET CAP

The sum USD value of the free float supply.

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+17.72%	373,780,735,698	414,472,608,963	352,080,679,946
ETH	+13.86%	192,298,061,323	208,145,183,797	182,815,813,186
XRP	+5.15%	22,342,925,002	23,016,327,186	21,811,553,677
ADA	+10.07%	8,100,061,424	8,711,887,121	7,898,998,932
LTC	+14.50%	4,938,888,929	5,381,988,283	4,700,499,804
CRO	+6.25%	604,932,623	628,240,374	591,298,077
LINK	+9.45%	2,770,836,059	2,934,716,650	2,681,349,778
UNI	+8.22%	1,091,570,083	1,150,228,028	1,062,856,034
всн	+30.12%	1,460,532,476	1,787,014,590	1,373,343,320
FTT	+9.62%	295,958,503	316,049,830	282,776,328

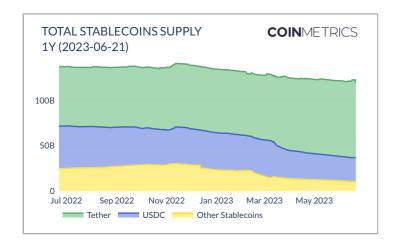
MARKET VALUE TO REALIZED VALUE

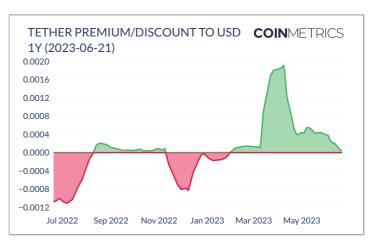
The ratio of a cryptoasset's market cap (aka market value) to realized cap (aka realized value).

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+17.53%	1.34	1.49	1.27
ETH	+12.12%	1.32	1.42	1.27
XRP	+4.39%	0.98	1.00	0.95
ADA	+15.49%	0.53	0.60	0.52
LTC	+14.59%	0.83	0.90	0.79
CRO	+7.45%	0.24	0.25	0.23
LINK	+6.56%	0.66	0.70	0.64
UNI	+8.02%	0.53	0.56	0.51
всн	+29.62%	0.51	0.62	0.48
FTT	+6.30%	0.34	0.36	0.33



STABLECOINS REPORT





MARKET CAPITALIZATION

USD value of current supply

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	+4.09%	38,660,010,963	39,037,883,128	37,495,059,924
USDT	+0.09%	887,687,729	888,165,340	887,158,721
USDT_TRX	-6.63%	45,672,030,245	46,139,693,462	43,030,567,560
PAX	-0.51%	1,002,643,413	1,006,463,582	997,571,564
DAI	+0.82%	4,417,292,805	4,444,953,202	4,389,817,621
USDC	+0.86%	26,617,096,708	26,774,101,056	26,464,718,096
BUSD	-1.70%	4,294,281,152	4,340,015,246	4,266,172,054
GUSD	+0.05%	565,715,714	568,151,870	563,053,797

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-37.22%	4,862,126,294	8,294,285,142	1,303,426,479
USDT	-86.61%	1,077,577	3,322,135	70,613
USDT_TRX	+34.83%	10,746,476,524	16,097,635,597	4,943,708,810
PAX	+48.38%	30,418,372	76,550,887	1,016,759
DAI	-47.29%	683,801,882	1,790,391,707	217,776,829
USDC	+2.10%	6,077,143,723	10,009,285,254	2,189,452,761
BUSD	-86.63%	186,804,933	633,406,128	3,695,924
GUSD	-44.55%	2,210,184	5,273,253	484,439





TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-8.09%	98,790	123,676	67,887
USDT	+103.33%	52	82	30
USDT_TRX	-16.65%	1,842,215	2,253,715	1,474,083
PAX	-45.95%	137	296	42
DAI	-0.16%	4,145	5,540	2,702
USDC	-10.94%	36,075	50,763	22,316
BUSD	-20.18%	609	892	363
GUSD	-27.87%	69	122	28

MEDIAN TRANSFER VALUE

Median USD value transferred per transfer between addresses

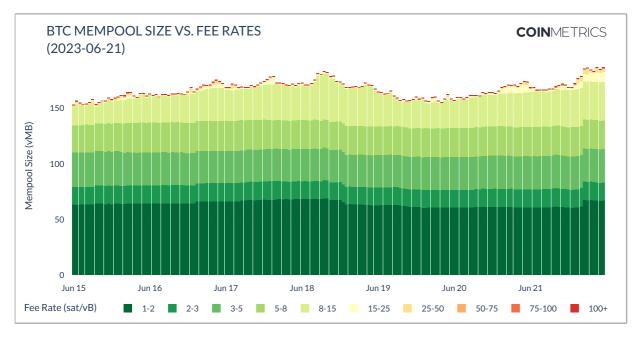
ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-3.39%	696	999	446
USDT	-92.07%	14,047	49,987	396
USDT_TRX	+68.22%	190	214	119
PAX	-84.97%	11,658	49,775	499
DAI	-39.69%	2,178	4,974	889
USDC	-3.56%	1,239	1,924	645
BUSD	-9.81%	714	1,110	247
GUSD	-18.05%	4,997	11,579	499

VELOCITY

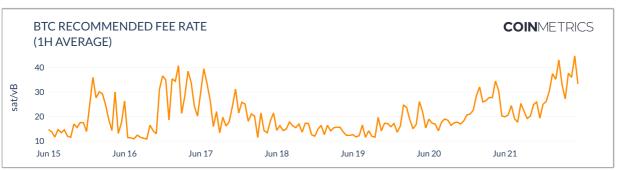
Number of times that an average native unit among the active supply has been transferred in the past 1 year

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
USDT_ETH	-5.04%	35.71	37.09	35.20
USDT	-0.15%	3.00	3.00	2.99
USDT_TRX	+7.89%	62.10	66.16	61.32
PAX	+0.66%	16.15	16.26	16.09
DAI	-3.42%	271.65	277.72	267.67
USDC	-1.78%	124.39	125.97	123.01
BUSD	-0.06%	62.32	62.78	62.00
GUSD	-6.80%	9.91	10.32	9.61

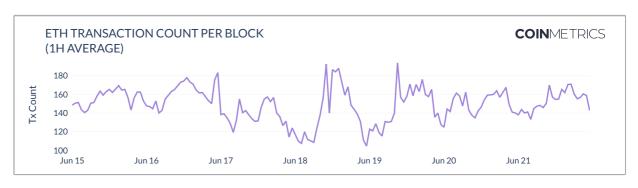
FEE MARKET



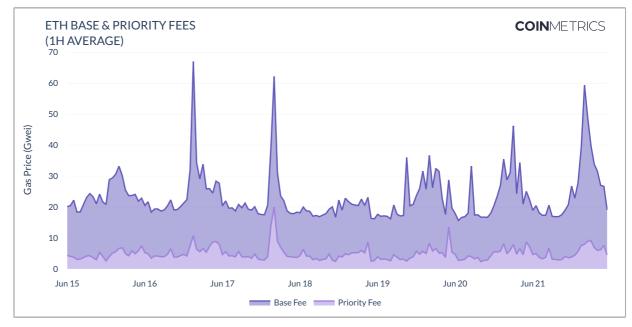












NETWORK DATA FUNDAMENTALS



ACTIVE ADDRESSES

Count of unique addresses that were active in the network

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+0.07%	917,006	958,674	863,600
ETH	-6.27%	554,487	597,862	501,732
XRP	-55.85%	46,273	73,950	29,384
ADA	-11.44%	53,833	63,245	41,080
LTC	-6.80%	351,538	428,213	261,119
CRO	+21.68%	311	397	277
LINK	+1.39%	2,676	3,331	1,912
UNI	-23.51%	1,062	1,459	770
всн	-33.90%	59,781	85,611	38,992
FTT	-39.42%	100	145	48

FREE FLOAT SUPPLY

Sum of native units readily available to trade in open markets

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-0.04%	13,775,138	13,777,672	13,770,076
ETH	+0.00%	109,909,602	109,942,943	109,875,597
XRP	+0.58%	45,895,728,358	45,934,459,603	45,667,396,752
ADA	+0.06%	30,289,302,938	30,298,026,756	30,278,666,709
LTC	-0.03%	63,184,908	63,194,974	63,170,738
CRO	-1.26%	11,223,914,837	11,244,411,113	11,102,358,216
LINK	+4.12%	524,284,451	527,284,628	506,378,629
UNI	+0.03%	240,334,578	240,345,063	240,277,669
ВСН	-0.01%	13,124,643	13,126,751	13,122,358
FTT	+3.15%	321,553,264	327,267,550	317,267,550

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

TRANSACTION COUNT

Count of transactions

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	-13.73%	439,565	521,861	363,604
ETH	-1.65%	1,064,685	1,146,585	984,217
XRP	+5.24%	1,017,924	1,097,275	921,895
ADA	-7.01%	68,066	77,169	51,203
LTC	-8.02%	230,516	324,003	147,147
CRO	+32.59%	367	548	301
LINK	-0.11%	3,096	3,975	2,300
UNI	-29.32%	1,391	2,183	984
ВСН	-75.12%	38,192	68,569	11,709
FTT	-63.11%	122	225	64

TRANSFER VALUE, ADJUSTED

USD value of the sum native units transferred removing noise

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+30.74%	4,546,873,170	7,033,073,202	2,876,184,108
ETH	+34.30%	2,805,919,274	4,600,902,901	1,217,477,917
XRP	+4,117.13%	3,472,387,893	21,594,847,703	171,183,683
ADA	-2.25%	10,459,956,794	11,788,672,245	7,818,586,773
LTC	+29.51%	75,175,445	116,748,534	46,439,481
CRO	+1,567.41%	2,101,343	8,943,169	462,407
LINK	+35.86%	81,519,513	320,927,339	26,143,321
UNI	-72.87%	17,341,540	57,443,703	5,385,396
ВСН	+686.48%	23,121,596	91,057,724	7,385,868
FTT	-84.42%	1,793,726	9,659,066	186,100

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

ADDRESSES ≥ \$1M

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+5.83%	71,646	74,325	70,228
ETH	+10.27%	10,247	10,847	9,837
XRP	+9.15%	1,105	1,181	1,076
ADA	+5.75%	777	809	765
LTC	+7.85%	461	481	446
CRO	+0.00%	48	48	48
LINK	+4.14%	291	302	285
UNI	+2.55%	280	282	275
ВСН	+21.76%	204	235	193
FTT	+0.00%	12	12	12

TRANSFER VALUE, 7 DAY TREND BTC ETH XRP ADA LTC CRO LINK UNI BCH FTT

ADDRESSES ≥ \$1

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

ASSET	7D CHANGE	7D AVERAGE	7D MAX	7D MIN
втс	+1.65%	40,176,248	40,562,814	39,904,100
ETH	+4.17%	58,603,352	59,992,122	57,590,975
XRP	-0.92%	4,677,184	4,713,874	4,664,769
ADA	+1.04%	3,513,707	3,538,645	3,502,196
LTC	+1.54%	2,297,658	2,313,434	2,278,276
CRO	+0.50%	149,569	150,015	149,267
LINK	+0.43%	511,473	512,874	510,660
UNI	+0.64%	276,047	277,136	275,360
ВСН	+7.24%	3,957,764	4,168,280	3,886,770
FTT	+0.26%	20,199	20,279	20,116

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^{M} 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 $^{\text{TM}}$, 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 on Coin Metrics Indexes</u>.

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 6/18/2023 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 6/18/2023 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. <u>More information</u> 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 SHARF

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

BASE ASSET SPOT VOLUME MARKET SHARE

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

LIQUIDATIONS

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

% PRICE CHANGE

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

REPORTED EXCHANGE VOLUME

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

SPOT VOLUME SHARE, % BY ASSET

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

ORDER BOOK DEPTH

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

DEX REPORTED SPOT VOLUME

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

DEX RISING VOLUME

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

DEX FALLING VOLUME

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

DATA EXPLAINER (P.3)

DEX VOLUME BY FEE TIER

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

DEX TOTAL VALUE LOCKED (TVL)

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

FUTURES OPEN INTEREST

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

FUTURES BASIS

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

FUTURES VOLUME

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

FUNDING RATES

Funding rates are a mechanism that exchanges use to ensure that perpetual futures trade at a price that is close to the price of the underlying spot markets. The funding rate is used to calculate the funding fee which long position holders pay short position holders, or vice versa, as a way to incentivize market participants to take positions that keep perpetual futures prices close to the underlying.

Positive funding rates indicate that the price of a perp contract is higher than mark price, forcing traders with long positions to pay those holding shorts. Inversely, negative funding rates mean that perp prices are below mark price, so those with shorts must pay the longs. Some analysts have noted that persistently positive funding rates tend to precede a downturn, while persistently negative rates can lead to short squeezes.

PERP & NON-PERP OPEN INTEREST

The reported futures open interest from markets in Coin Metrics' coverage in units of U.S. dollars, aggregated across all futures markets for a particular asset and segmented by contract type (perpetual and non-perpetual futures).

A perpetual ("perp") contract is a special type of futures contract, which is an agreement to buy or sell a cryptoassets at a predetermined price at a specified time in the future. Perpetuals do not have a an expiry date, so one can hold the position for as long as desired.

OPTIONS OPEN INTEREST

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

OPTIONS IMPLIED VOLATILITY VS. STRIKE PRICE (VOLATILITY SMILE)

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

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

OPTIONS GREEKS

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

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

DATA EXPLAINER (P.4)

MARKET CAPITALIZATION (MARKET CAP)

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

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

FREE FLOAT MARKET CAP

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

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

REALIZED CAP

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

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

MARKET TO REALIZED VALUE (MVRV)

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

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

TOTAL STABLECOIN SUPPLY

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

TETHER PREMIUM/DISCOUNT TO USD

30-day moving average of Tether's price YTD premium or discount to USD. Price represents Coin Metrics' Reference Rate, which is calculated using an independent methodology robust to manipulation. <u>More information</u> 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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