

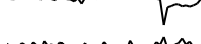

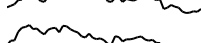

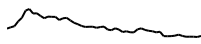





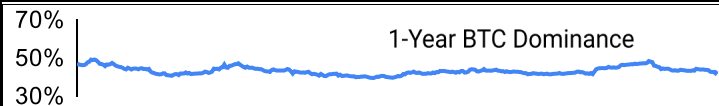
Crypto Leaderboard

Rank	Name	Ticker	Price	24h	7d	30d	24h Vol \$m	MC \$m	1-Year Chart
1	Bitcoin	BTC	\$23,815	8%	23%	17%	49,655	454,821	
2	Ethereum	ETH	\$1,606	4%	54%	49%	23,608	192,795	
3	Tether	USDT	\$1.00	0%	0%	0%	71,287	65,844	
4	USD Coin	USDC	\$1.00	0%	0%	0%	7,931	54,863	
5	BNB	BNB	\$269	3%	22%	33%	1,889	44,016	
6	Ripple	XRP	\$0.38	4%	20%	0%	11,133	18,158	
7	Binance	BUSD	\$1.00	0%	0%	18%	8,245	18,037	
8	Cardano	ADA	\$0.53	8%	26%	8%	1,658	17,887	
9	Solana	SOL	\$45.37	0%	38%	32%	2,011	15,694	
10	Dogecoin	DOGE	\$0.07	9%	22%	26%	917	9,753	

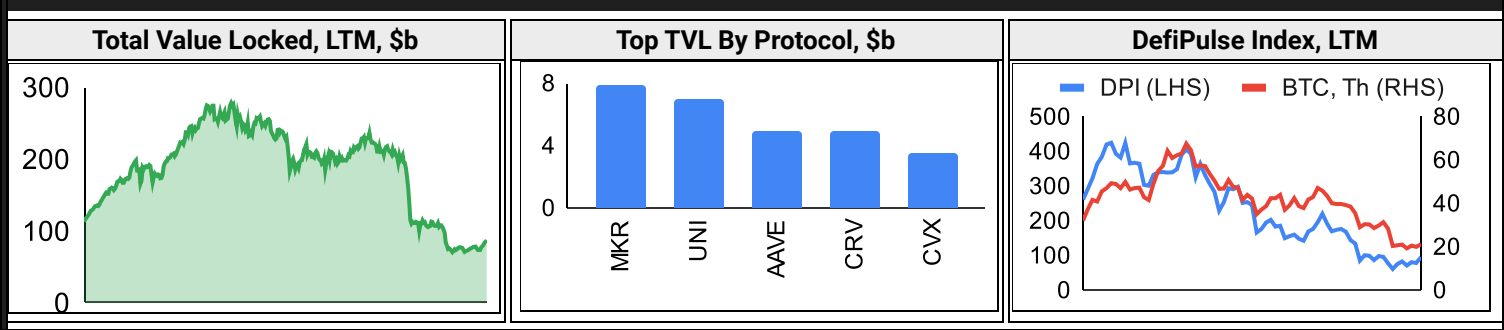
Top & Bottom Performers - Top 100 Tokens

24h		7 Days		30 Days		90 Days		365 Days	
LDO	20%	LDO	192%	USTC	567%	TRX	10%	CVX	207%
OMI	14%	ETC	79%	LDO	239%	USDP	0%	SAND	176%
FXS	12%	MATIC	70%	MATIC	162%	CDAI	0%	AVAX	122%
APE	11%	STETH	57%	QNT	113%	CUSDC	0%	NEAR	109%
AAVE	-2%	TUSD	0%	HT	-3%	FTM	-76%	GRT	-80%
AXS	-2%	DAI	0%	PAXG	-6%	NEAR	-77%	FIL	-87%
XCN	-3%	PAXG	-1%	XAUT	-6%	FXS	-82%	FLOW	-89%
AR	-4%	XCN	-9%	HNT	-7%	USTC	-96%	USTC	-96%

Category Performance

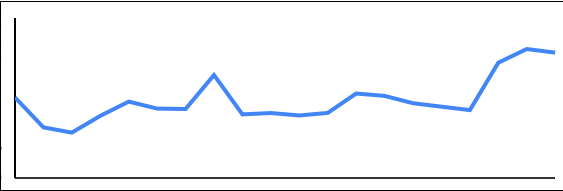
Category	1d	7d	30d	90d	365d	Ecosystem	1d	7d	30d	90d	365d
DAOs	-2%	4%	2%	-55%	-72%	BSC	0%	9%	1%	-55%	-58%
Privacy	-2%	3%	-15%	-56%	-64%	Gnosis Chain	2%	6%	-7%	-64%	-67%
DEX / B&L	-3%	2%	-6%	-60%	-72%	Avalanche	-2%	2%	-4%	-59%	-60%
IoT	-2%	1%	-4%	-53%	-1%	Polygon	-2%	2%	-3%	-59%	-46%
DeFi	-2%	1%	-2%	-62%	-74%	Solana	-2%	1%	-6%	-64%	-64%
Dist. Computing	-1%	-1%	-12%	-63%	-69%	Cosmos	-1%	0%	-9%	-71%	-69%
Smart Contract	-2%	-2%	-8%	-65%	-53%	Polkadot	-2%	-2%	-10%	-63%	-67%
Meme	-2%	-2%	-1%	-63%	131%	Terra	-2%	-11%	11%	-94%	-96%
CEXs	-1%	-2%	-17%	-42%	-1%						
NFTs	-3%	-3%	-2%	-63%	-25%						
Gaming	-3%	-4%	-2%	-65%	14%						

DeFi

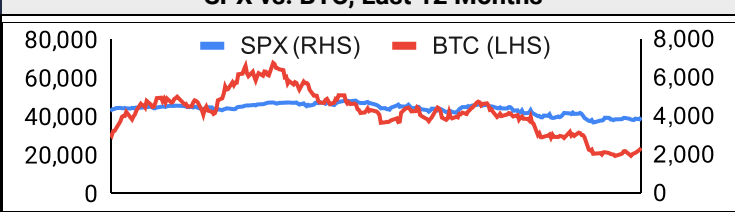


Trading Volume

Aggregate Volumes by Product, \$b					Top Derivatives Exchanges, \$m and bps					Top Spot Exchanges, \$m		
	1d	7d	30d	O/I	Exchange	1d Vol	O/I	Mkr	Tkr	Exchange	Score	1d Vol
Spot	51	264	1,030	n/a	Binance	77,051	19,904	2.0	4.0	Binance	9.9	21,363
Perpetuals	104	543	2,180	20	FTX	10,386	3,815	2.0	7.0	FTX	8.2	2,968
Futures	1	5	21	1	OKX	23,877	4,184	2.0	5.0	Coinbase	8.2	2,834
Options	0	0	0	0	KuCoin	5,334	1,444	2.0	6.0	Kraken	7.7	945

20 Day Volume - Top 100 Tokens, \$b					Top Volume, 1d, \$m		Top Volume, %20d Avg		Low Volume, %20d Avg	
					USDT	76,192	FLOW	388%	USTC	42%
					BTC	49,946	STX	295%	10SET	50%
					ETH	24,208	WAVES	289%	BCH	51%
					USDC	9,033	BIT	277%	USDP	55%
					BUSD	8,672	TUSD	274%	XAUT	70%

Traditional Finance

Global Equity Markets*							SPX vs. BTC, Last 12 Months		
	US	USGrwth	UK	Germany	Japan	HK			
1D	3%	3%	2%	5%	1%	1%			
7D	4%	4%	3%	6%	2%	0%			
90D	-10%	-11%	-11%	-16%	-7%	-1%			
365D	-9%	-17%	-5%	-31%	-20%	-19%			

10-Year Treasury Yields							Commodities & FX					
	US	Brazil	UK	Germany	Japan	HK		WTI	Gas	Gold	EUR/USD	USD/JPY
Last	2.97%	13.56%	2.08%	1.20%	0.24%	2.94%	Last	99	7.4	1,710	1.02	138.2
1d Chg	-0.046	+0.067	-0.1015	-0.0815	-0.006	-0.053	1d % Chg	-2.10%	+2.00%	-0.07%	-0.32%	-0.03%

Crypto News

[21Shares launches S&P risk-controlled Bitcoin and Ether ETPs - Cointelegraph](#)
[Polygon is helping to bring the Ethereum Virtual Machine to ZK-Rollups - The Block](#)
[Crypto lender Vault owes \\$363 million to retail investors after halting withdrawals - The Block](#)
[Crypto exchange Zipmex halts withdrawals due to 'volatile market conditions' - The Block](#)
[Blockchain security firm Halborn raises \\$90 Million in Series A funding - The Block](#)
[Meta partners with digital fashion startup DressX to launch virtual clothes - The Block](#)
[FBI warns investors, financial institutions about crypto cyber crime: report - The Block](#)
[Crypto staking firm Figment says it will support MEV on Ethereum 2.0 - The Block](#)
[THORChain hits kill switch to retire Rune tokens on Ethereum and BNB Chain - The Block](#)
[BNP Paribas to partner with Metaco to explore crypto custody: CoinDesk - The Block](#)
[Gemini receives virtual asset service provider license in Ireland - Cointelegraph](#)
[US federal agency issues legal advisory on NFT investments - Cointelegraph](#)
[Lummis-Gillibrand crypto bill likely deferred to next year - Cointelegraph](#)
[Japan's crypto self-regulation 'experiment' not working - Cointelegraph](#)
[Skybridge announces suspension of withdrawals from one of its crypto-exposed funds - Cointelegraph](#)
[US Justice Department seized \\$500K in fiat and crypto from hackers connected to DPRK - Cointelegraph](#)
[Source claims 3AC's Deribit exposure is worth much less than reported - Cointelegraph](#)



Market Update - July 20, 2022

Crypto Options

BTC ATM Implied Vol, 1m



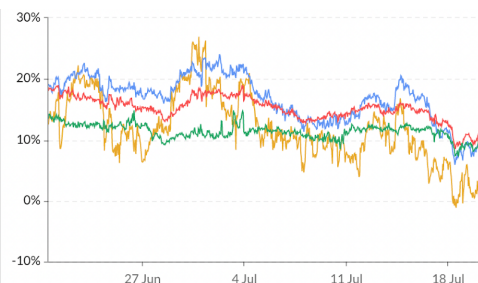
1wk ATM Vol Min: 61.4%, Max: 102.8%, Avg: 76.0%, Last: 78.3%
1mth ATM Vol Min: 65.0%, Max: 91.6%, Avg: 76.0%, Last: 72.8%
3mth ATM Vol Min: 68.5%, Max: 81.7%, Avg: 74.9%, Last: 71.2%
6mth ATM Vol Min: 70.4%, Max: 80.4%, Avg: 75.1%, Last: 72.1%

ETH ATM Implied Vol, 1m



1wk ATM Vol Min: 76%, Max: 130%, Avg: 97%, Last: 105%
1mth ATM Vol Min: 83%, Max: 113%, Avg: 96%, Last: 96%
3mth ATM Vol Min: 86%, Max: 110%, Avg: 96%, Last: 92%
6mth ATM Vol Min: 88%, Max: 107%, Avg: 95%, Last: 90%

BTC 25d Skew, 1m



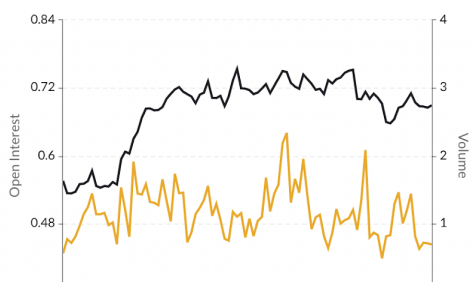
1wk 25d skew Min: -3%, Max: 27%, Avg: 12%, Last: 1%
1mth 25d skew Min: 6%, Max: 24%, Avg: 17%, Last: 9%
3mth 25d skew Min: 9%, Max: 19%, Avg: 15%, Last: 10%
6mth 25d skew Min: 7%, Max: 15%, Avg: 11%, Last: 8%

ETH 25d Skew, 1m



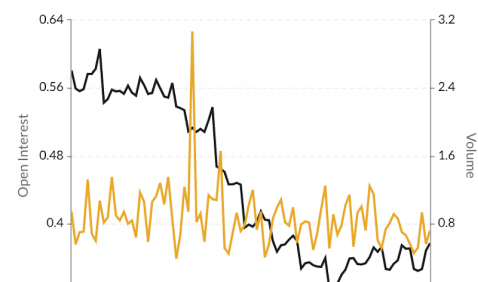
1wk 25d skew Min: -8%, Max: 28%, Avg: 13%, Last: -3%
1mth 25d skew Min: -5%, Max: 24%, Avg: 15%, Last: -1%
3mth 25d skew Min: -8%, Max: 22%, Avg: 12%, Last: 0%
6mth 25d skew Min: -8%, Max: 18%, Avg: 8%, Last: 0%

BTC Put/Call Ratios, 3m



Open Interest Min: 0.53, Max: 0.75, Avg: 0.68, Last: 0.69
Volume Min: 0.48, Max: 2.33, Avg: 1.16, Last: 0.69

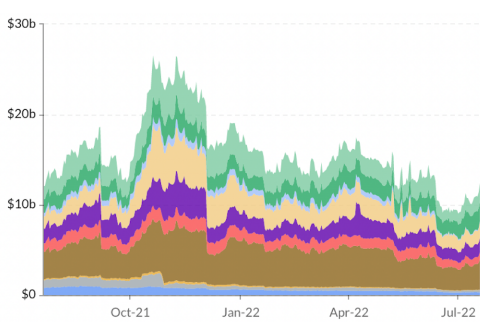
ETH Put/Call Ratios, 3m



Open Interest Min: 0.32, Max: 0.61, Avg: 0.45, Last: 0.38
Volume Min: 0.38, Max: 3.07, Avg: 0.87, Last: 0.72

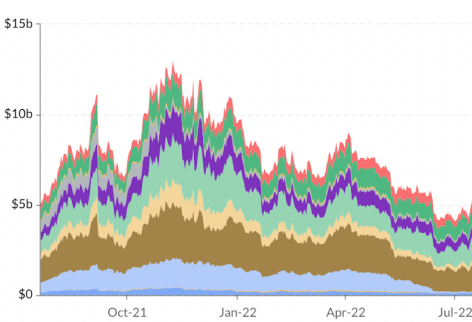
Crypto Futures

BTC Aggregate Open Interest, 1y



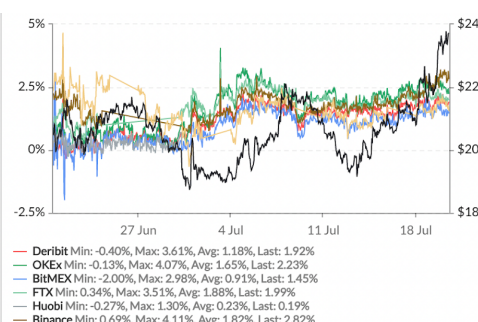
BitMEX, Huobi, Kraken, Binance, Deribit, Bybit, CoinFlex, CME, Bitfinex, OKEx, FTX

ETH Aggregate Open Interest, 1y



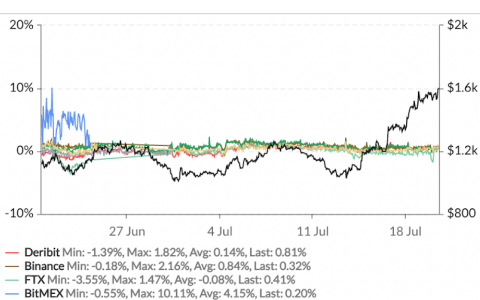
BitMEX, Bybit, Huobi, Kraken, Bitfinex, Binance, CME, FTX, OKEx, Deribit

BTC Annlzd Rolling 3m Basis, 1m



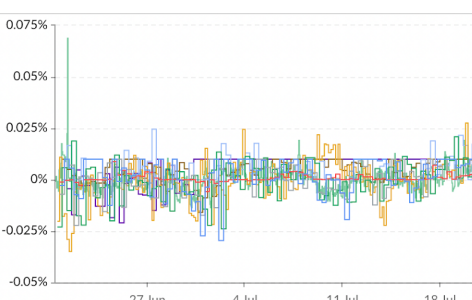
Deribit Min: -0.40%, Max: 3.61%, Avg: 1.18%, Last: 1.92%
OKEx Min: -0.13%, Max: 4.07%, Avg: 1.65%, Last: 2.23%
BitMEX Min: -2.00%, Max: 2.98%, Avg: 0.91%, Last: 1.45%
FTX Min: 0.34%, Max: 3.51%, Avg: 1.88%, Last: 1.99%
Huobi Min: -0.27%, Max: 1.30%, Avg: 0.23%, Last: 0.19%
Binance Min: 0.69%, Max: 4.11%, Avg: 1.82%, Last: 2.82%
CME* Min: -0.67%, Max: 4.67%, Avg: 1.59%, Last: 1.55%
BTC Spot Index Min: \$18.73k, Max: \$23.78k, Avg: \$20.62k, Last: \$23.73k

ETH Annlzd Rolling 3m Basis, 1m



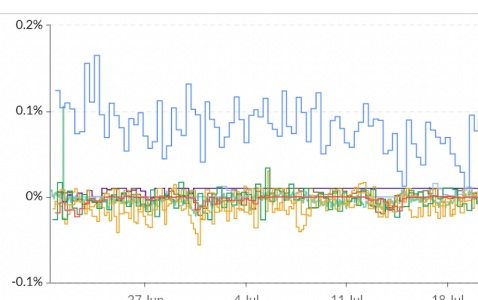
Deribit Min: -1.39%, Max: 1.82%, Avg: 0.14%, Last: 0.81%
Binance Min: -0.18%, Max: 2.16%, Avg: 0.84%, Last: 0.32%
FTX Min: -3.55%, Max: 1.47%, Avg: -0.08%, Last: 0.41%
BitMEX Min: -0.55%, Max: 10.11%, Avg: 4.15%, Last: 0.20%
Huobi Min: -0.94%, Max: 0.51%, Avg: -0.19%, Last: -0.57%
OKEx Min: -0.26%, Max: 2.32%, Avg: 0.75%, Last: 0.53%
CME* Min: -0.74%, Max: 1.69%, Avg: 0.36%, Last: 0.44%
ETH Spot Index Min: \$1.01k, Max: \$1.60k, Avg: \$1.18k, Last: \$1.60k

BTC Perp Swaps Funding, 1m



Bybit Avg: 0.0060%, Binance Avg: 0.0050%, Bitfinex Avg: 0.0040%, OKEx Avg: -0.0012%, FTX Avg: 0.0000%, Kraken Avg: 0.0006%, BitMEX Avg: 0.0019%, Deribit Avg: 0.0008%, Huobi Avg: 0.0008%

ETH Perp Swaps Funding, 1m



Bybit Avg: 0.0087%, Binance Avg: 0.0009%, Bitfinex Avg: 0.0011%, OKEx Avg: -0.0034%, FTX Avg: -0.0035%, Kraken Avg: -0.0111%, BitMEX Avg: 0.0813%, Deribit Avg: -0.0030%, Huobi Avg: -0.0055%



Market Update - July 20, 2022

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GSR's experienced team brings together decades of institutional trading expertise, while our industry-leading proprietary technology stack anchors everything we do.

Our main service areas are: market making; proprietary and algorithmic trading; client execution; structured products; risk management solutions; and portfolio investments.

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Required Disclosures

*Based on price returns for the following ETFs: VOO, QQQ, EWU, EWG, EWJ, and EWH.

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