

# CF Cryptocurrency Ultra Cap 5

Q U A R T E R L Y   A T T R I B U T I O N   A N A L Y S I S

## The CF Ultra Cap 5 Index

The CF Cryptocurrency Ultra Cap 5 (CFUC5) is an investible benchmark index tracking the performance of a free float market capitalization weighted portfolio of the 5 largest cryptocurrencies by market capitalization. It is the first true measure of the market beta of cryptocurrencies being a Registered Benchmark under EU BMR. All pricing sources for constituents of the index are also themselves Registered Benchmarks. The index is calculated and published once every second in accordance with the methodology. The portfolio composition is determined by the CF Digital Asset Index Family Multi Asset Series Ground Rules with constituent reviews taking place twice a year and monthly rebalancing. The index was launched on August 18th 2020 with an inception date of September 1st 2018 at a value of 1000.



Source: CF Benchmarks LTD., Bloomberg LP, as of December 1st, 2022

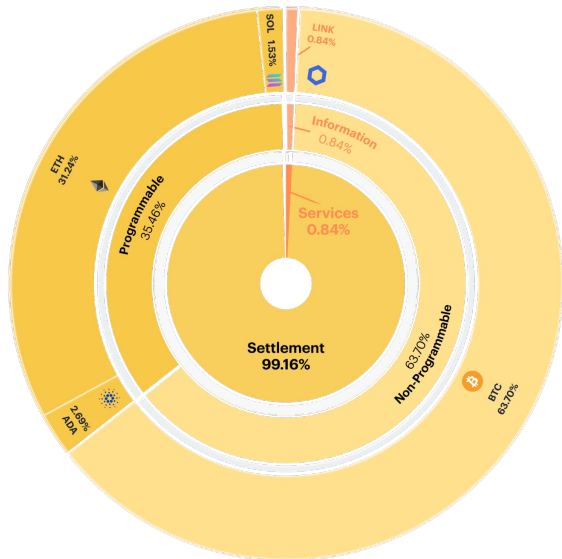
## 'FUD' top of mind despite easing macro uncertainty

Another exogenous shock has led crypto markets lower over the last rebalancing period as one of the world's largest exchanges surprisingly filed for bankruptcy. The CF Ultra Cap 5 Index fell over -16% with pricing volatility surging in the month of November. The bear market that began earlier this year has only intensified after each over-levered institution or organization collapses. These failures have had a cascading impact on the overall asset class, with the falling prices of crypto markets sparking an industry deleveraging exercise, spreading contagion that leads to even further discounting of crypto assets.

Regarding the macroenvironment, risk sentiment has begun to look toward an eventual pivot or slowdown in monetary tightening. The most recent inflationary trends indicate that headline pricing pressures may have peaked in June. This dynamic is expected to be supportive of crypto markets, which face particularly pronounced headwinds from a rising interest rate environment. However, core inflation is likely to be more difficult to tame and the overall level of inflation is likely to remain above any acceptable threshold for some time. This has left crypto market participants in limbo when trying to balance the improving data on the inflation side and spillover impacts from the latest fallout of a major market player.

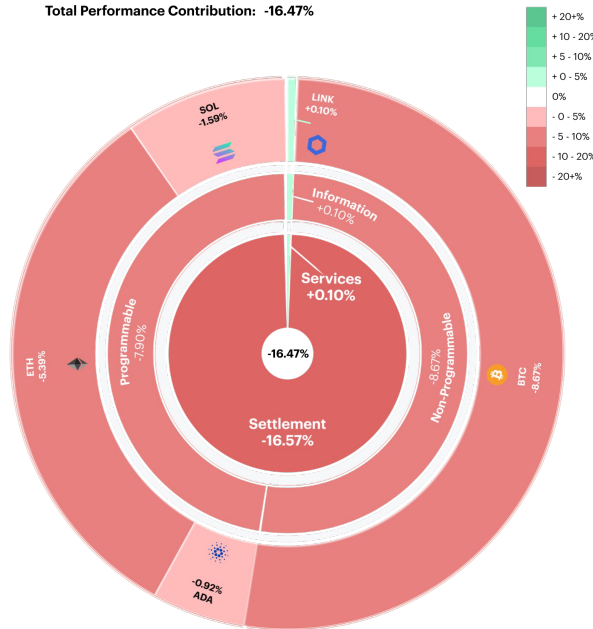
## Index Weights

Total Weight: 100%  
Index Value: 2378.74



## Index Return Contribution

Total Performance Contribution: -16.47%



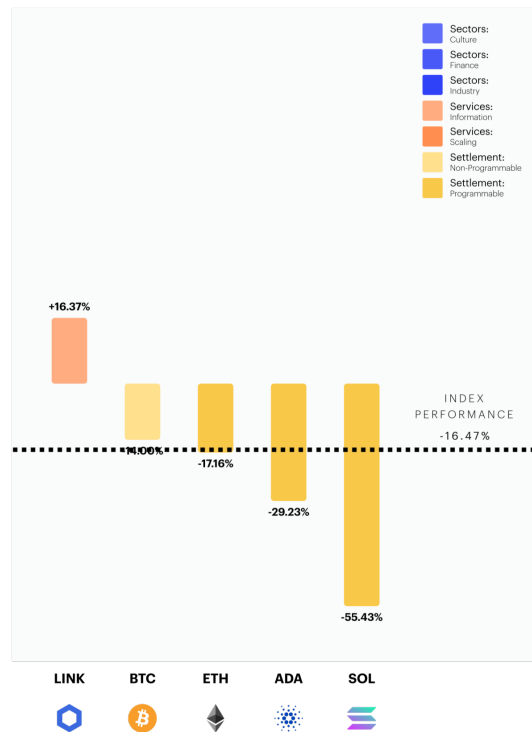
# Big-blues outweigh LINK's rise

Our barometer for mega-cap tokens remained under pressure, falling approximately -16.5%. The index is heavily weighted towards the Settlement segment, which contributed over 100% of the negative performance during the last rebalancing period.

The Level 2 layer was heavily impacted by Solana's (SOL) weak performance. The Ethereum competitor detracted almost 1.6% of performance despite its modest 2.8% initial weighting. Lastly, the Services segment ended in positive territory due to Chainlink's (LINK) resilient quarter.

## Absolute Performance

Index Performance: -16.47%



## Planned staking launch boosts LINK

Chainlink (LINK) outperformed the mega-cap peer group by a significant margin, rising over 16% for the quarter. This marks the second straight quarterly-rebalance period that LINK has remained on top. Bullish price action began in late October after its developers announced plans to launch a novel staking program. This will eventually allow token holders to earn passive income on their holdings. Furthermore, staking activity should potentially provide steady burning of LINK tokens, adding a deflationary catalyst for its tokenomics.

Solana (SOL) saw its market cut in half over the last three months. The Ethereum competitor came under pressure the wake of FTX/Alameda fallout. The FTX empire was a major investor and supporter of Solana. FTX’s fatal liquidity crunch ultimately led to forced selling of SOL holdings, sending the token to levels last seen in March of 2021.

## Market sentiment swings favours BTC over ETH

The CF Ultra-Cap index is intended to represent the mega-cap tokens in the crypto universe. Of which, a large portion is then allocated to the two largest: bitcoin (BTC) and ethereum (ETH). The relative pricing performance of the two crypto-behemoths are often cited as gauges for risk sentiment of the overall crypto market. An example of this would be when BTC outperforms ETH, which would indicate a more defensive sentiment in the marketplace (or vice versa).

For the first time since the April-June quarter, bitcoin has seen a relatively stronger performance when compared to its programmable peer. If we study the 10-day rolling volatility measure of a broader index, such as our Diversified Large Cap, we see that the recent volatility spikes in mid-September and early November has had a diminishing impact on ETH's relative performance. However, the quick collapse in volatility back to the sub-40% level is likely to remain supportive for ETH once again.



Source: CF Benchmarks LTD., Bloomberg LP, as of December 1st, 2022

# Appendix: Market Performance Overview

## Major Crypto-Pairs (USD)

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bitcoin	3.9%	3.8%	-16.2%	-15.3%	-63.1%	55.33
Ethereum	6.4%	10.9%	-17.1%	-17.4%	-64.8%	69.65
XRP	2.7%	8.2%	-10.2%	24.0%	-50.5%	81.54
Litecoin	2.3%	0.5%	43.3%	43.4%	-46.3%	77.95
Dash	-0.1%	-0.7%	3.5%	-4.3%	-67.8%	75.00
Zcash	9.1%	1.4%	-16.4%	-27.8%	-70.0%	75.36
Solana	3.2%	-2.1%	-57.5%	-57.0%	-91.9%	146.15
Avalanche	4.5%	2.1%	-31.0%	-32.7%	-88.1%	78.74
Polkadot	2.8%	1.0%	-17.6%	-23.1%	-79.5%	60.36
Doge	2.4%	29.6%	-16.3%	66.0%	-40.1%	106.79
Polygon	10.2%	9.4%	3.1%	11.0%	-63.2%	108.62
Chainlink	1.4%	15.7%	-6.9%	9.7%	-63.6%	77.85
Uniswap	6.8%	6.8%	-15.3%	-6.0%	-65.7%	84.26
Algorand	3.2%	1.8%	-30.6%	-15.1%	-85.1%	92.94
Cardano	1.7%	0.5%	-22.0%	-31.5%	-76.7%	50.52
Maker	2.4%	1.5%	-26.1%	-14.5%	-71.6%	87.35
Aave	6.9%	13.7%	-21.0%	-23.5%	-74.2%	78.34
Curve DAO Token	0.4%	-3.1%	-23.7%	-42.1%	-87.4%	112.57
Axie Infinity	1.9%	1.5%	-24.5%	-52.1%	-89.1%	83.03

## Commodities

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bloomberg Commodity Index	0.8%	-0.4%	2.4%	17.0%	17.0%	19.61
Bloomberg Energy Subindex	0.4%	-2.8%	-1.1%	52.6%	52.6%	37.18
Bloomberg Industrial Metals Su	2.7%	3.4%	14.1%	-6.1%	-6.1%	29.67
Bloomberg Precious Metals Subi	0.2%	0.3%	7.9%	-6.9%	-6.9%	19.61
Bloomberg WTI Crude Oil Subind	3.0%	3.3%	-5.7%	23.1%	23.1%	41.71
Bloomberg Gold Subindex Total	-0.2%	0.1%	6.8%	-4.7%	-4.7%	15.88

## Equities

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
S&P 500 INDEX	3.1%	1.4%	5.6%	-13.1%	-13.1%	25.12
NASDAQ 100 Stock Index	4.6%	1.6%	5.6%	-25.7%	-25.7%	31.87
FTSE 100 Index	0.8%	1.6%	7.1%	6.1%	6.1%	12.72
MSCI Europe Index	0.7%	0.5%	6.9%	-5.7%	-5.7%	15.83
MSCI Japan Index	-0.3%	-0.5%	2.9%	1.1%	1.1%	17.01
MSCI Emerging Markets Index	2.0%	4.3%	14.8%	-18.7%	-18.7%	20.55
MSCI World Index	2.2%	0.9%	7.0%	-14.1%	-14.1%	21.94
MSCI ACWI Index	2.2%	1.3%	7.8%	-14.6%	-14.6%	20.27

## Fixed Income

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bloomberg Global-Aggregate Bond Index	0.0%	-0.2%	4.7%	-16.7%	-16.7%	9.43
Bloomberg Global Agg Credit Index	0.2%	0.0%	5.4%	-17.1%	-17.1%	9.59
Bloomberg Global High Yield Index	0.3%	0.5%	5.0%	-13.3%	-13.3%	8.95
Bloomberg US Long Treasury Bond Index	0.7%	-0.3%	7.1%	-28.0%	-28.0%	19.88
Bloomberg US Short Term Treasury Index	0.0%	0.1%	0.3%	-0.5%	-0.5%	0.51
Bloomberg Global Inflation-Linked Index	1.4%	0.7%	1.8%	-10.9%	-10.9%	9.33

## Fiat Currency Pairs

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
DOLLAR INDEX SPOT	-0.8%	-0.1%	-5.0%	-2.5%	10.7%	11.92
EURO/US DOLLAR	0.7%	0.1%	5.3%	3.5%	-8.5%	12.04
BRITISH POUND/US DOLLAR	0.9%	0.0%	5.1%	3.8%	-10.9%	16.81
JAPANESE YEN/US DOLLAR	0.4%	1.1%	7.7%	0.7%	-16.6%	13.33
US DOLLAR/SWISS FRANC	-0.8%	0.3%	-5.6%	-3.3%	3.6%	11.18
AUSTRALIAN DOLLAR/US DOLLAR	1.5%	0.8%	6.1%	-0.8%	-6.5%	16.04
MEXICAN PESO/US DOLLAR	-0.2%	0.5%	2.8%	4.5%	6.5%	9.43
BRAZIL REAL/US DOLLAR	1.7%	3.1%	-0.3%	-0.2%	7.3%	20.42
US DOLLAR/SINGAPORE DOLLAR	-0.9%	-1.1%	-3.9%	-2.6%	0.9%	6.35
TAIWAN DOLLAR/US DOLLAR	0.3%	1.1%	4.7%	-1.4%	-10.2%	6.28

Source: CF Benchmarks LTD., Bloomberg LP, as of November 30th, 2022

# Appendix: constituent changes for current period

Additions (+)	Subtractions (-)
<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>

Source: CF Benchmarks LTD., Kraken, as of November 30th, 2022





## Appendix: CF Digital Asset Classification Structure

The CF Digital Asset Classification Structure (DACS) classifies coins and tokens based on the services that the associated software protocol delivers to end users, grouping assets by the role they play in delivering services to end users. The CF DACS powers CF Benchmarks' sector composite and category portfolio indices and allows users to perform attribution analysis to better understand the fundamental drivers of returns within their digital asset portfolios.

## Additional Resources

For more information about our CF Benchmark indices and our methodologies, please visit the respective web links below:

- [CF Diversified Large Cap Index](#)
- [CF DeFi Composite Index](#)
- [CF Web 3.0 Smart Contract Platforms Index](#)
- [CF Digital Culture Composite Index](#)
- [CF Blockchain Infrastructure Index](#)
- [CF Cryptocurrency Ultra Cap 5 Index](#)

## Contact Us

Have a question or would like to chat? If so, please drop us a line to:

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