

CF Benchmarks' Market Recap

J U N E - A U G U S T 2 0 2 2

Macro Forces Remain in Control For Now

The challenging macroeconomic environment continued for digital assets: inflation remained at multi-decade highs, central banks have made sizeable policy rate increases, and global growth has begun to stall. Markets continue to be sensitive to increases in central bank policy rates, which has led to a tightening of financial conditions in an effort to stymie inflation in most developed market economies. Although this dynamic has been visible across most risky assets, such as equities, the naturally higher volatility in the digital asset space has amplified downside price action.

It is worth noting that macro forces were not the only driving force this past quarter. Idiosyncratic catalysts stemming from the upcoming Ethereum Proof-of-Stake (PoS) upgrade, or “merge”, helped reverse negative price momentum in July. At one point, ETH prices rose as much as 90% from the late June lows, leading the world’s second largest token (by market capitalization) to be one of the top relative performers in the Large-Cap space. Merge bullishness also spilled over into the the Blockchain Infrastructure Index, with scaling solutions posting strong relative and absolute performance. Lastly, deposits in the DeFi ecosystem have begun to stabilize after regulatory uncertainty soured protocol demand in June.

CF Diversified Large Cap Index

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

The CF Diversified Large Cap Index

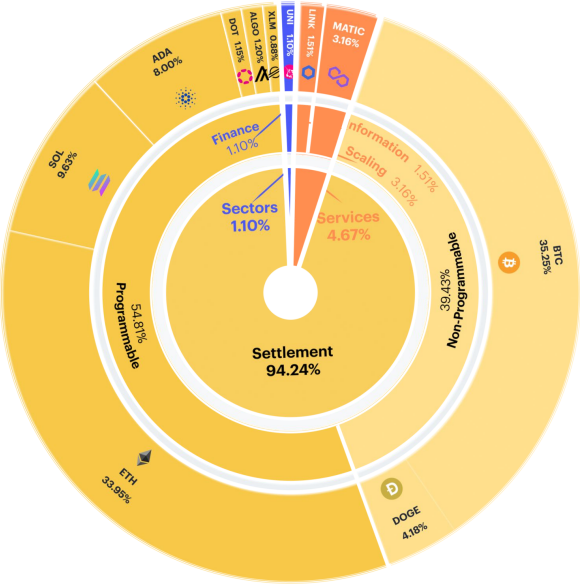
The CF Diversified Large Cap Index - is a liquid, investible benchmark portfolio index designed to track the performance of large-cap digital assets. The index seeks to capture 95% of the total market capitalization of the investible digital asset universe as its constituents. Index constituents are weighted using the diversified market capitalization which is determined by the free-float market capitalization adjusted by the application of the harmonic series' terms. This has the benefit of discounting the higher capitalization assets within the portfolio in accordance with the CF Multi Asset Series Ground Rules and the CF Diversified Large Cap Index Methodology. The index is calculated and published every second. The index is re-constituted on a twice yearly basis and rebalanced quarterly. The CF Diversified Large Cap Index - was inception on December 1st 2021 with a value of 1,000. The index was launched on February 14th, all values from inception date to launch date provided are backtested.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

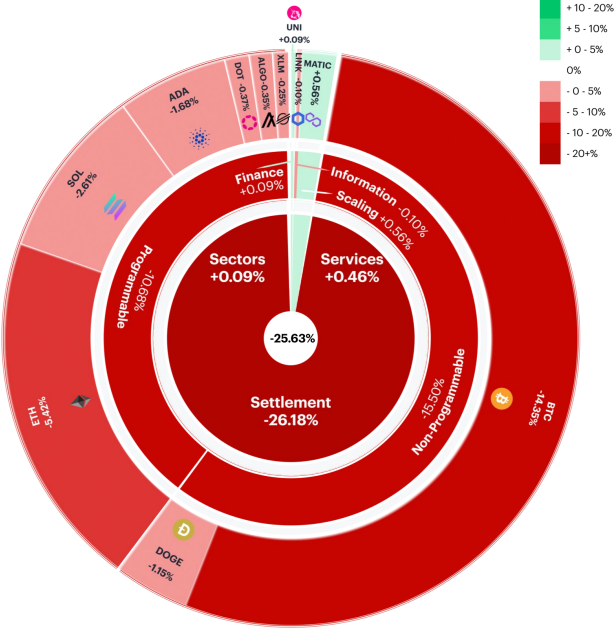
Index Weights

Total Weight: 100%
Index Value: 296.58



Index Return Contribution

Total Performance Contribution: -25.63%



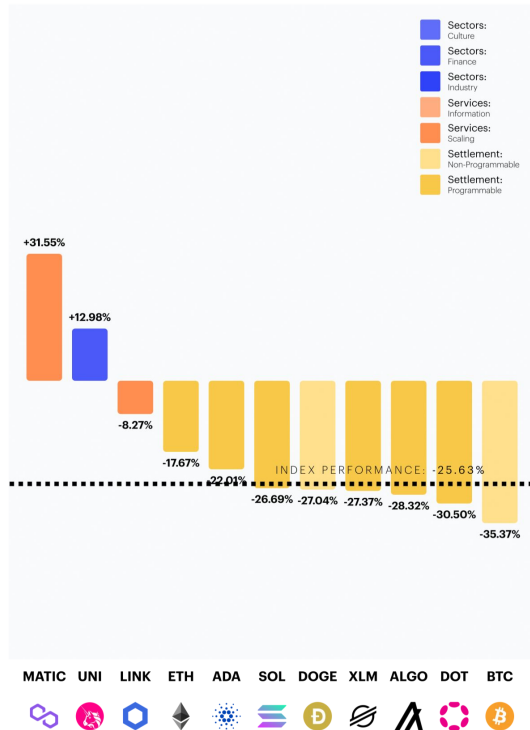
Scaling and DeFi Play Defense

Large-cap tokens remained under pressure, falling over 25%. From a Level 1 Digital Asset Classification Structure (DACS) perspective, the heavily weighted Settlement segment contributed most (-26.2%) to the index's decline, with Bitcoin, a non-programmable token, contributing the lion's share of negative performance.

Conversely, the Services and Sectors segments, saw relative outperformance, each contributing slightly positive performance over the rebalance period.

Absolute Performance

Index Performance: -25.63%



Source: CF Benchmarks LTD., as of August 31st, 2022

Merge Hysteria lifts UNI and MATIC

The world's most used programmable blockchain is set for a major upgrade this month which propelled ETH prices up over the \$2,000 level before finally giving up some the gains over the last few weeks. The positive ETH sentiment spilled over segments like DeFi and Scaling. MATIC and UNI both finished the rebalance period up +31.5% and +13.0%, respectively. Investors see the potential merge as a fundamental catalyst for DeFi tokens and Layer 2 scaling solutions to attract more institutional development once the Ethereum blockchain performs its upgrade.

The decision to switch from Proof-of-Work (PoW) to Proof-of-Stake (PoS) is anticipated to increase ETH's bull thesis. First off, miners will be replaced by validators who are required to stake at least 32 ETH which will offer potential yield for participating in the network. Secondly, developers are planning on decreasing annual ETH issuance by ~90%, adding a disinflationary element. Lastly, the upgrade is set to exponentially improve bandwidth and speed, while only using a fraction of the energy.

Crypto Fights the Fed

Central banks across the globe have embarked on an aggressive crusade in fighting historically high inflation. The Fed has even decided to super-size their rate increases by upping their policy rate by 150 bps over the last two meetings. Currently, markets are still anticipating a greater than 50% chance that the Federal Reserve and European Central Bank will both tack on another 75 bps in their upcoming September Meetings.

Meanwhile, rate speculators anticipated that the terminal funds rate should be around 350 bps for the U.S., which would imply that another supersized rate hike will set the central bank close to neutral. The chart to the right illustrates how the May and June rate increases coincidentally had a sizeable impact on Large Cap tokens, but it appears that this relationship has softened in July with markets coming to terms with a lingering hawkish monetary regime. Meanwhile, investors seem to be looking around the corner to an eventual pivot in hawkish policy stances, which would rekindle bullish sentiment.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

What's Driving Crypto? Rolling 30-Day Large Cap Correlations

Equities								Fixed Income								Currencies, Commodities, and Other									
S&P 500 INDEX	NASDAQ 100 STOCK INDX	FTSE 100 INDEX	MSCI EUROPE	MSCI JAPAN	MSCI EM	MSCI WORLD	MSCI ACWI	US Generic Govt 3 Mth	US Generic Govt 2 Yr	US Generic Govt 5 Yr	US Generic Govt 10 Yr	2YR-10YR Yield Curve	5 YR Real Yield	Inflation Adjust Real Yield (10YR)	Global Aggregate	Global High Yield	DOLLAR INDEX SPOT	Gold Spot \$/Oz	Crude Oil (WTI)	BBG Commodity Index	BBG Energy Index	BBG Industrial Metals	BBG Precious Metals	Cboe Volatility Index	Financial Conditions Index
0.86	0.85	0.75	0.87	0.84	0.41	0.85	0.84	0.11	0.23	0.01	-0.15	0.17	0.75	-0.21	0.48	0.79	-0.13	0.39	-0.12	0.68	0.61	0.80	0.59	-0.50	-0.33

Overall, the CF Diversified Large Cap Index continues to trade with a strong correlation to equities prices. Emerging market equities (EM) displayed a relatively lower correlation despite the duo's shared sensitivity to rising interest rates and a strong USD. In fixed income, we can see how speculative high yield moves directionally similar during periods of poor sentiment. Lastly, the strongest inverse relationships to large-cap tokens can be found in the volatility index (VIX) and financial conditions index.

CF DeFi Composite Index

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

The CF DeFi Composite Index

The CF DeFi Composite Index - is a liquid, investible benchmark portfolio index that tracks the return performance of decentralised financial services, commonly referred to as "DeFi". The index is comprised of three distinct sub-portfolios of fixed weight that represent the components of blockchain architecture that are required to deliver decentralised financial services to individual and institutional end users; DeFi Applications, Services and Settlement Blockchains. Digital assets are classified in accordance with the CF Digital Asset Classification Structure (DACS) for sub-portfolio eligibility.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

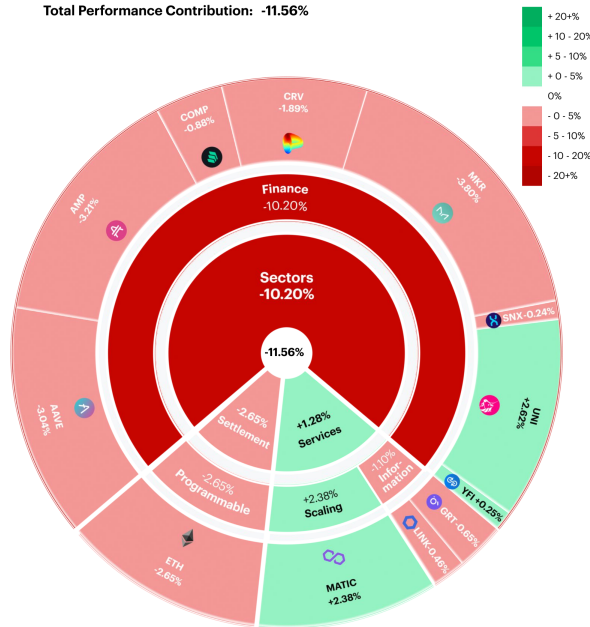
Index Weights

Total Weight: 100%
Index Value: 271.61



Index Return Contribution

Total Performance Contribution: -11.56%



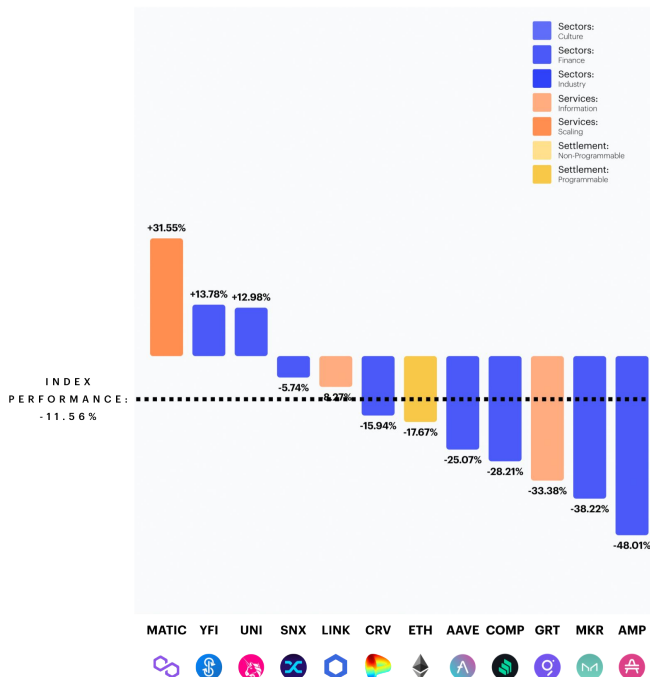
Scaling Stands Out

Despite the added tailwinds from the upcoming ETH blockchain upgrade, our DeFi index fell -11.6%. The Level 2 headline segment (Finance) contributed the most (-10.2%) to the index's decline, with AMP and AAVE contributing to over half of the segment's total figure.

Meanwhile, the level 2 Scaling segment provided over 230 bps points of positive performance. However, overall segment breadth remained shallow as the MATIC token was solely responsible for contributing all of this positive performance.

Absolute Performance

Index Performance: -11.56%



Regulatory Risks take Focus

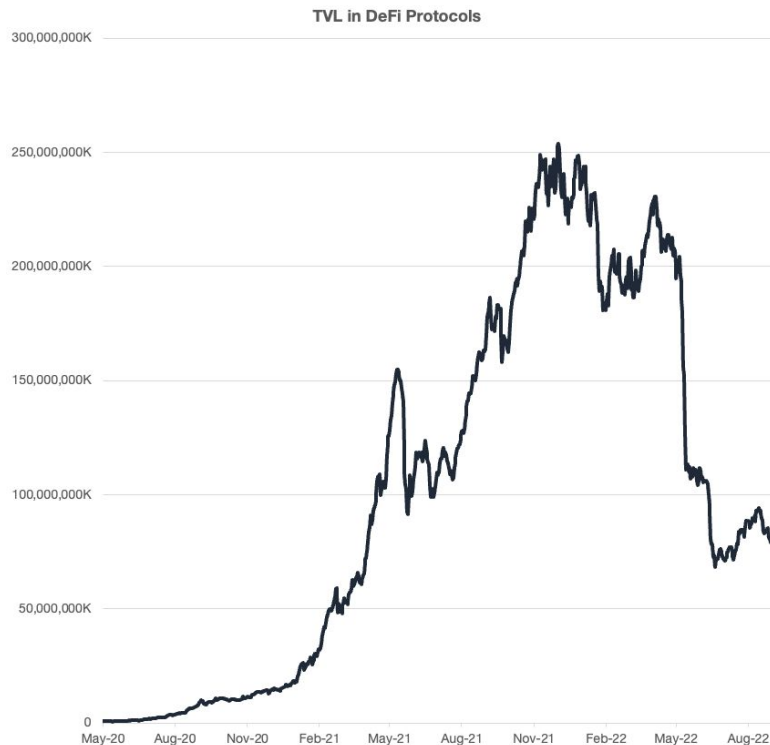
Crypto investors are no strangers to the regulatory challenges that frequently present themselves in the space. Last month, The SEC classified AMP and eight other tokens as securities in a case involving insider trading. The token now trades approximately -30% lower than its previous pre-securitization range, finishing the rebalance period down -48% overall. (These circumstances have deemed AMP ineligible for constituency moving forward.) Investor sentiment has soured due to the fear of higher regulatory standards required for trading securities (as opposed to commodities or digital tokens). COMP and AAVE saw this negative sentiment spill-over with the tokens falling -28% and -25%, respectively. The circumstances have deemed AMP ineligible for constituency moving forward.

Matic, an Ethereum Layer 2 solution, finished up over +31%, and was the top performer in the index. Investors believe that upcoming “Merge” of the Ethereum blockchain will accelerate institutional use-cases. Lastly, UNI and YFI also also caught wind of the merge-momentum, each rallying over 12%.

TVL Stabilizes Post Terra

A common metric for measuring the size of the DeFi market is total value locked (or TVL), which sums the total amount of USD that is currently deposited in DeFi Protocols. By this measure, the market size peaked in late 2021 at just over of \$250B. During this period, the crypto bull market led to an exponential increase in developer and investor activity into the space. TVL remained relatively stable until the collapse of the Terra Blockchain and its widely used stablecoin (UST) which sent the DeFi segment into a tailspin this past June.

Protocol locked values have since began to settle in around \$50B area. This increase in stability, along with the positive relative price momentum found in the segment's tokens is creating a more constructive outlook which should lead to added confidence for investors and developers to return back into the DeFi space again.



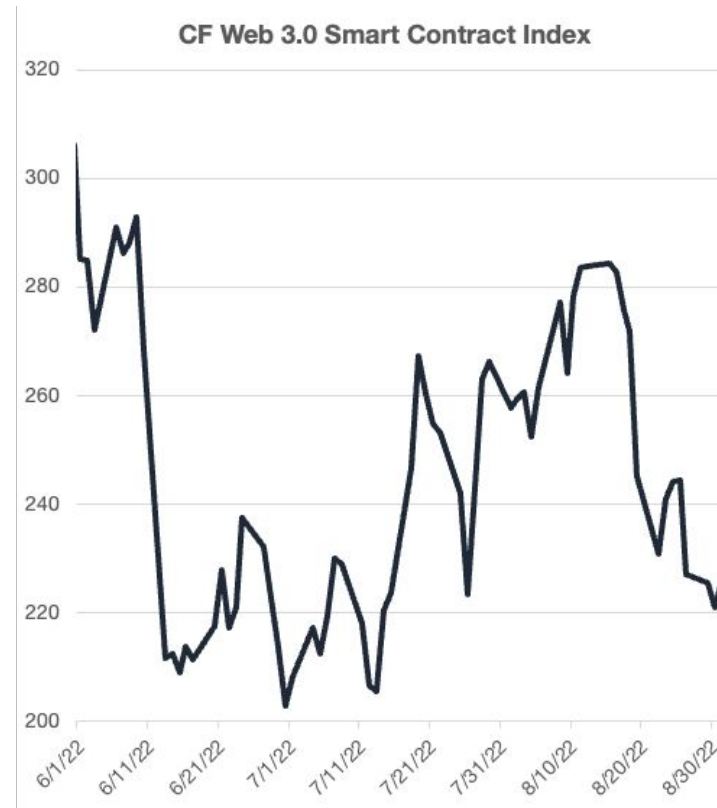
Source: CF Benchmarks LTD., Defillama.com, as of September 1st, 2022

CF Web 3.0 Smart Contract Platforms Index

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

The CF Web 3.0 Smart Contract Platforms Index

The CF Web 3.0 Smart Contract Platforms Index - is a liquid, investible benchmark portfolio index that tracks the return performance of Smart Contract Platforms within the Digital Asset space. The index seeks to capture returns of all eligible protocols under the Settlement category and Programmable sub-category of the CF Digital Asset Classification Structure (DACS). Index constituents are weighted using a capped free-float market capitalization in accordance with the CF Digital Asset Series Ground Rules and the index methodology. The index is calculated and published once a day at 4:00 pm London Time. It is reconstituted on a twice yearly basis and rebalanced quarterly. The CF Web 3.0 Smart Contract Platforms Index was inception on December 1st 2021 with a value of 1,000. The index was launched on June 28th, all values from inception date to launch date provided are backtested.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

Index Weights

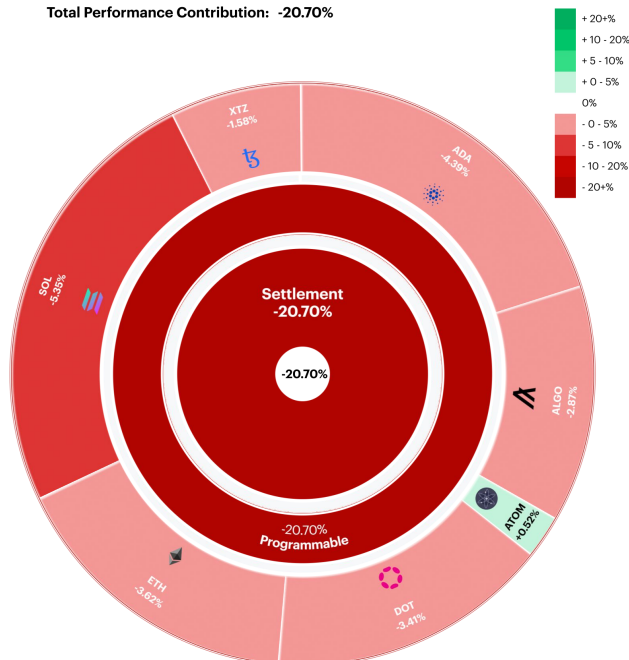
Total Weight: 100%

Index Value: 226.19



Index Return Contribution

Total Performance Contribution: -20.70%



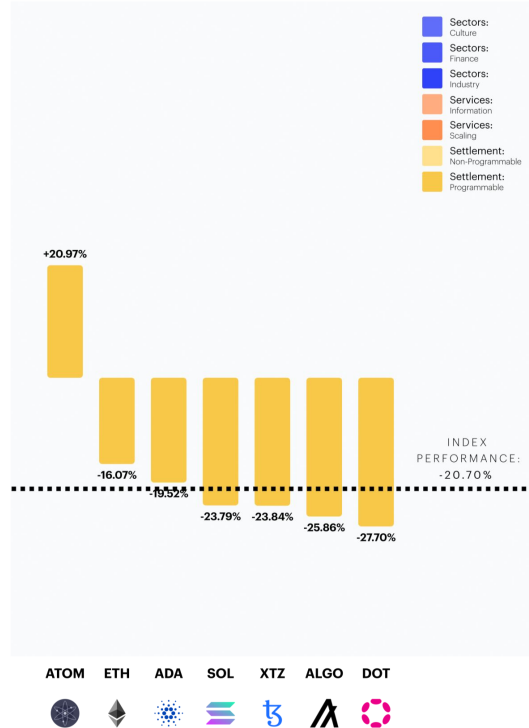
SOL & ADA Drive Index Lower

Performance Contribution was broadly negative in the Smart Contracts space. The headline index finished the rebalancing period down -20.7%, with the majority of the negative performance coming from SOL and ADA. ATOM was the sole token to finish in positive territory. However, its modest weight (~2%) led to only a minor positive index contribution.

Despite ETH's top weighting in the index, the token contributed -3.6% to the index return (3rd overall) as the hype around its scheduled blockchain upgrade boosted sentiment.

Absolute Performance

Index Performance: -20.70%



ATOM's Positive Momentum Intact

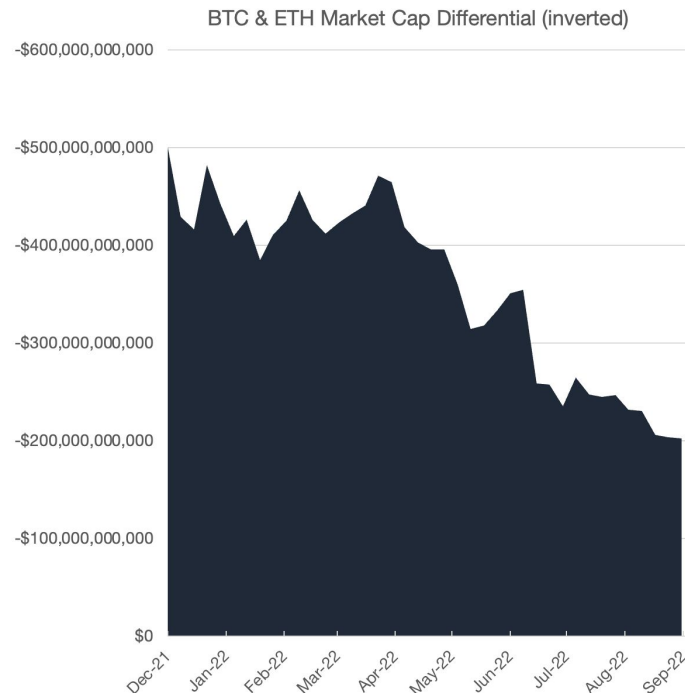
Cosmo's native token, ATOM, provided a standout performance over its peer group, finishing the quarterly window up +20.9% and outperforming the parent index by over +40% in absolute terms. The ATOM protocol is commonly proclaimed to be "the Internet of Blockchains" due to its unique customizability and interoperability. ATOM's price trend has been stable over the past few months, and overall price volatility is impressively lower than the parent index.

The runner up in absolute terms was ETH. Despite finishing in negative territory, investor sentiment has remained relatively more resilient as the Ethereum network continues to advance on its claims to switching its blockchain network from Proof-of-Work (PoW) to Proof-of-Stake (PoS). The highly anticipated change is set to deliver higher efficiency and bandwidth, which is believed to help bolster its competitive edge against Layer-2 blockchain solutions.

ETH Flipping Edging Closer

The term “Flipping” refers to the relative pricing momentum of the two largest crypto tokens, ETH and BTC. Cryptomarket enthusiasts are keen to speculate or predict that ETH will one day overtake BTC as the world's largest token by market capitalization.

In the start of the year, the spread differential between BTC and ETH stood at approximately \$500bn. This gap has narrowed considerably over last eight months, breaching \$200bn for the first time in recent history. If the current trend persists, ETH could reach the top of the league tables by the end of 2023, or sooner.



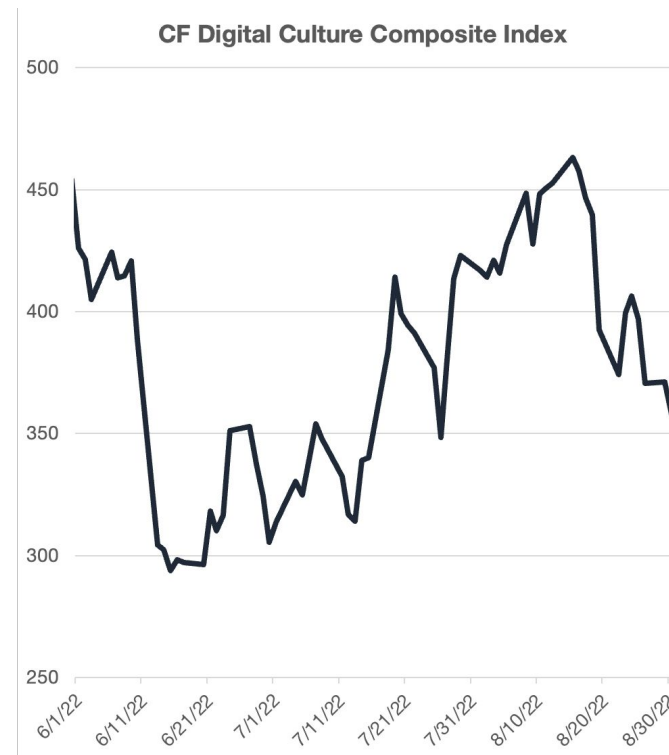
Source: CF Benchmarks LTD., Bloomberg LP, as of September 2nd, 2022

CF Digital Culture Composite Index

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

CF Digital Culture Composite Index

The CF Digital Culture Composite Index - is a liquid, investible benchmark portfolio index that tracks the return performance of protocols involved in the digitization and tokenization of cultural experiences and artefacts including the Metaverse, NFTs, Gaming, and Music. The index is comprised of three distinct sub-portfolios of fixed weight that represent the components of blockchain architecture that are required to deliver the digitised culture to individual and institutional end users; Digital Culture Applications, Services and Settlement Blockchains. Digital assets are classified in accordance with the CF Digital Asset Classification Structure (DACs) for sub-portfolio eligibility. Digital assets are weighted by free float market capitalisation within each sub-portfolio in accordance with the CF Digital Asset Series Ground Rules and the index methodology. The index is calculated and published once a day at 4:00 pm London Time. It is reconstituted on a twice yearly basis and rebalanced quarterly. The CF Digital Culture Composite Index - London was inceptioned on February 1st 2022 with a value of 1,000.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

Digital Culture Begins to Bottom in the Macro Storm

The challenging macroeconomic environment continued for digital assets: inflation remains at multi-decade highs, central banks are making sizeable policy rate increases, and global growth has begun to stall. Meanwhile, the CF Digital Culture Index has fallen -12.5% over the course of our most recent rebalancing period, leaving the index approximately 66% below its March all time highs. Markets have remained vulnerable to increases in central bank policy rates that has led to a tightening of financial conditions in an effort to stymie inflation in most developed market economies. Although this dynamic has been visible across most risky assets, such as equities, the naturally higher volatility in the digital asset space has amplified downside price action.

Tokens in the Digital Culture index have followed the overall negative trend in crypto markets. However, it is worth noting that the Culture segment has been a relative laggard when compared to other segments in our Digital Asset Classification Structure (DACS). The more aggressive selling pressure that occurred earlier in the year has now led to a quicker bottoming pattern for token prices in the segment. In turn, this has been relatively supportive for the segment over the past rebalancing period.

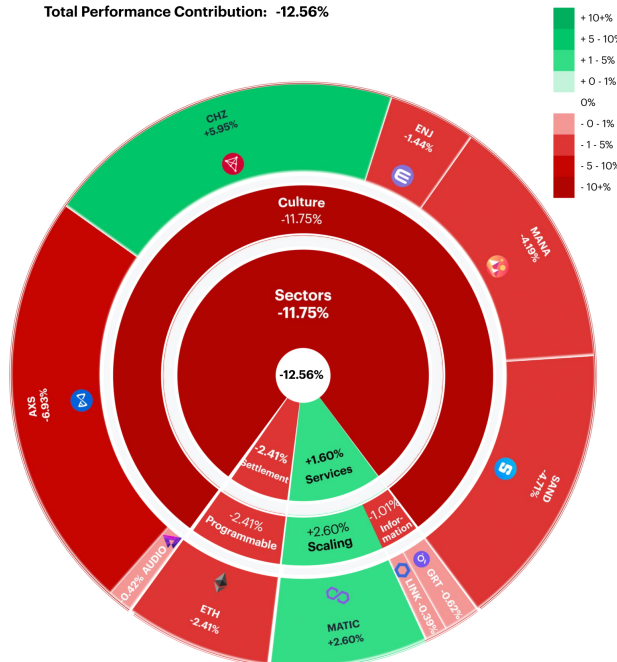
Index Weights

Total Weight: 100%
Index Value: 372.41



Index Return Contribution

Total Performance Contribution: -12.56%



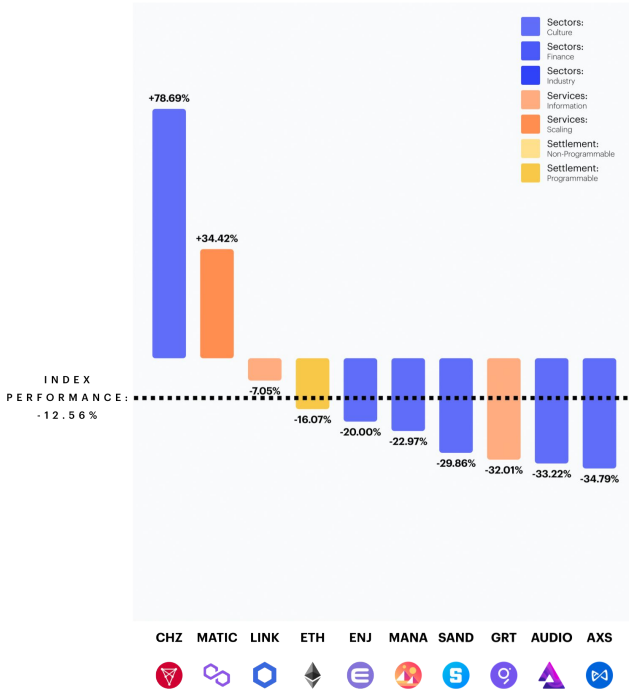
Scaling Stands Out

The CF Digital Culture index fell -12.5% as performance contributions from the complementary Services segment was overwhelmingly negated by the -11.8% performance contribution found in the headline segment (Culture).

From a level 2 DACS perspective, the Scaling segment soared, with MATIC contributing +2.6%. Lastly, the Programmable segment displayed relative resilience with its modest -2.4% performance contribution.

Absolute Performance

Index Performance: -12.56%



Breadth Broadly Negative

Market breadth in the CF Digital Culture Composite remained historically low. Of the 6 constituents in the Culture Segment, 5 underperformed the index by a margin of 8% or more (in absolute terms). Additionally, the average performance of this cohort ex-CHZ was approximately -30% for the period. CHZ remained a true standout, posting a 78% rally after Chiliz attained a new strategic partnership with one of Europe's most prestigious football clubs.

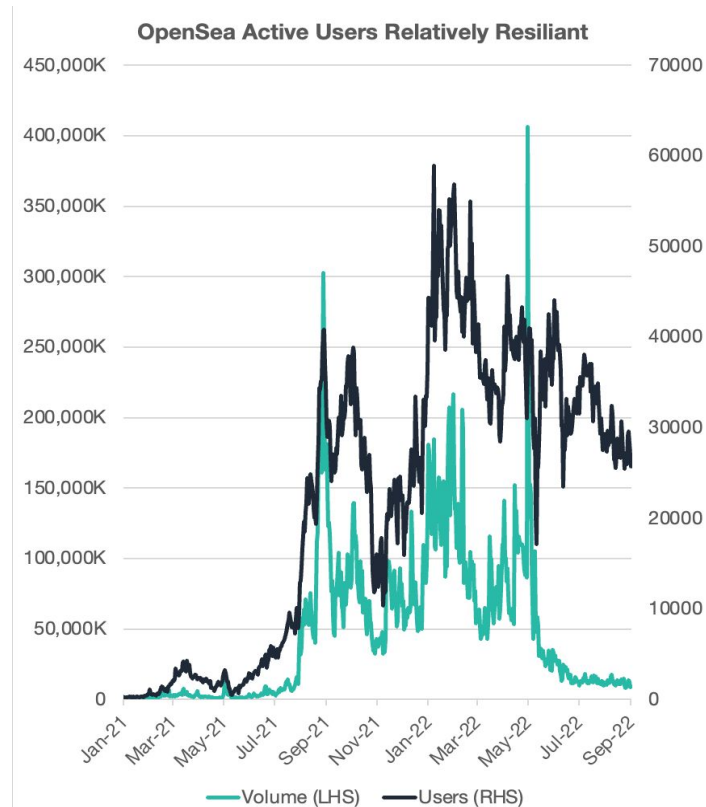
Outside of the headline group, the Layer 2 scaling solution (MATIC) rose over +34.4%, leaving it as the only other token to finish in positive territory. Layer 2 solutions have seen a pick up in investor sentiment that can be attributed to the recent timeline announcement for the Ethereum blockchain merge.

NFT Market Activity Update

Exuberance in the NFT space seems to have dissipated. The world's largest NFT marketplace has seen a flatline in transaction volume over the past quarter. Volumes averaged between 75K-125K from the September '21-May'22 bull market run. In early June, transaction volumes broke below 30K for the first time since August of 2021.

This turmoil has had a sizable impact on on the top performing NFTs, floor prices for the Bored Ape Yacht Club recently broke below 70 ETH, down approximately 55% from the all time highs.

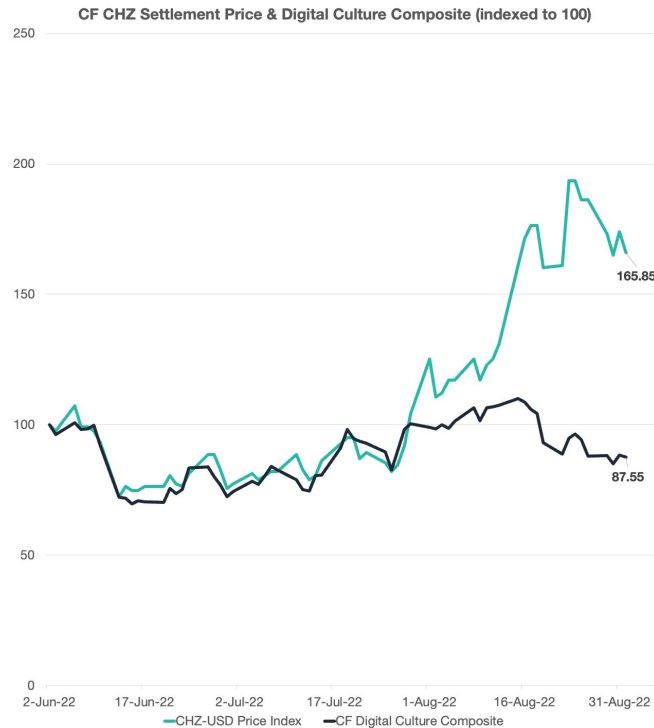
Meanwhile, users of the OpenSea Platform have also been on a steady down trend. Although, the declines in users have been more resilient in comparative terms, and user counts still remain above, or close to, the bull-run range. The normalization that has taken place in the NFT marketplace has certainly been painful, but the recent normalization in sentiment, along with an increase in institutional adoption, should be supportive for future developments in the space.



Source: CF Benchmarks LTD., OpenSea, DappRader, CoinGecko as of September 1st, 2022

Barça Bump for GameFi Token

FC Barcelona, one of the most popular football organizations in the world, announced a strategic €100m investment into Chiliz (CHZ). The Chiliz blockchain network creates customized fan tokens for sports teams. Fans around the world will be able to purchase the team's tokens using CHZ tokens, and token holders will have exclusive benefits and rewards. The announcement of the partnership sent prices soaring, leaving CHZ to be the top performer in our CF Digital Culture Index.



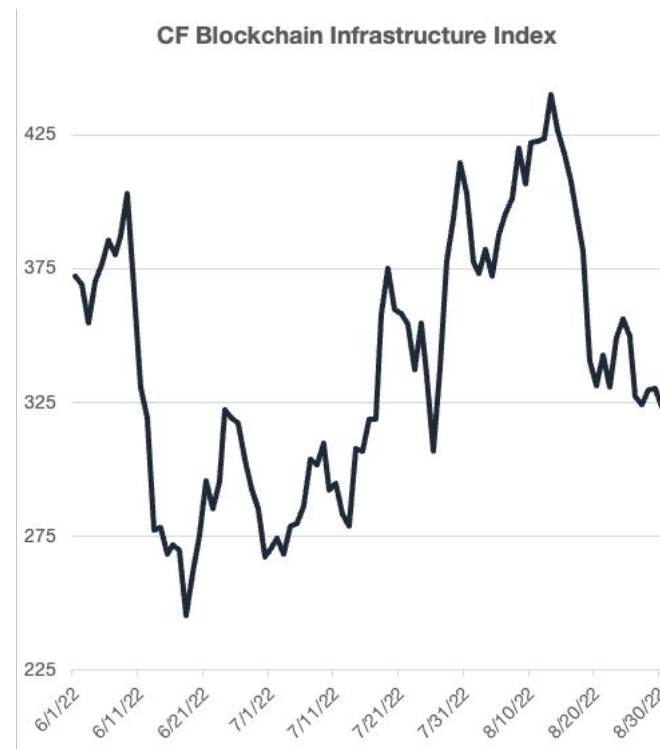
Source: CF Benchmarks LTD., Bloomberg LP, as of September 1st, 2022

CF Blockchain Infrastructure Index

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

The CF Blockchain Infrastructure Index

The CF Blockchain Infrastructure Index - is a liquid, investible benchmark portfolio index that tracks the return performance of blockchain services within the Digital Asset space. The index seeks to capture returns of all eligible protocols under the Services category of the CF Digital Asset Classification Structure. Index constituents are weighted by using a capped free-float market capitalisation in accordance with the CF Digital Asset Series Ground Rules and the index methodology.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

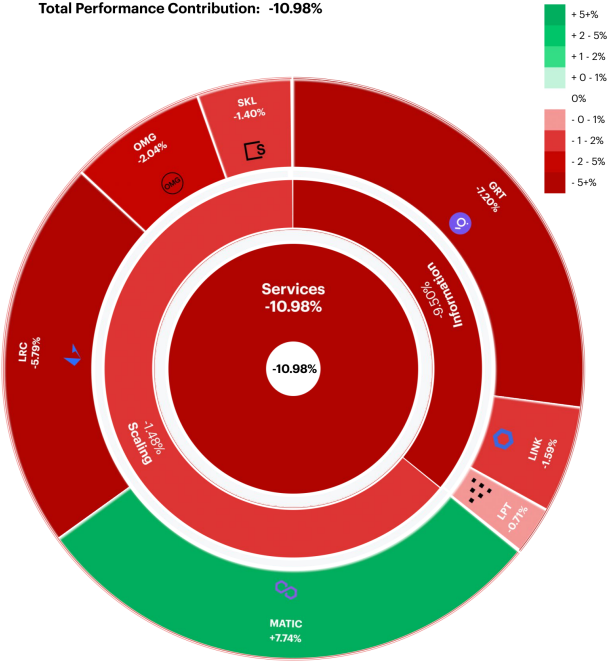
Index Weights

Total Weight: 100%
Index Value: 331.22



Index Return Contribution

Total Performance Contribution: -10.98%



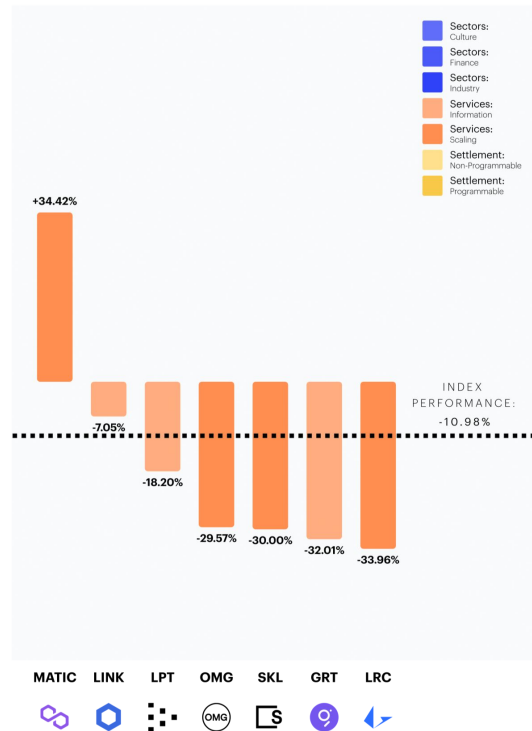
Information Protocols
Lag

The CF Blockchain Infrastructure Index fell approximately -11%, with GRT and LRC leading negative contributors and knocking -7.2% and -5.8% off of index performance, respectively. Positive performance remained shallow, with MATIC providing +7.7% of positive price impact.

From a Digital Asset Classification Structure (DACS) perspective, the divergence in Level 2 performance categories was notable. The Scaling segment returned a modest -1.5% decline, as opposed to the steeper -9.5% contribution with the Information category.

Absolute Performance

Index Performance: -10.98%



Bullish Breadth Narrows on MATIC

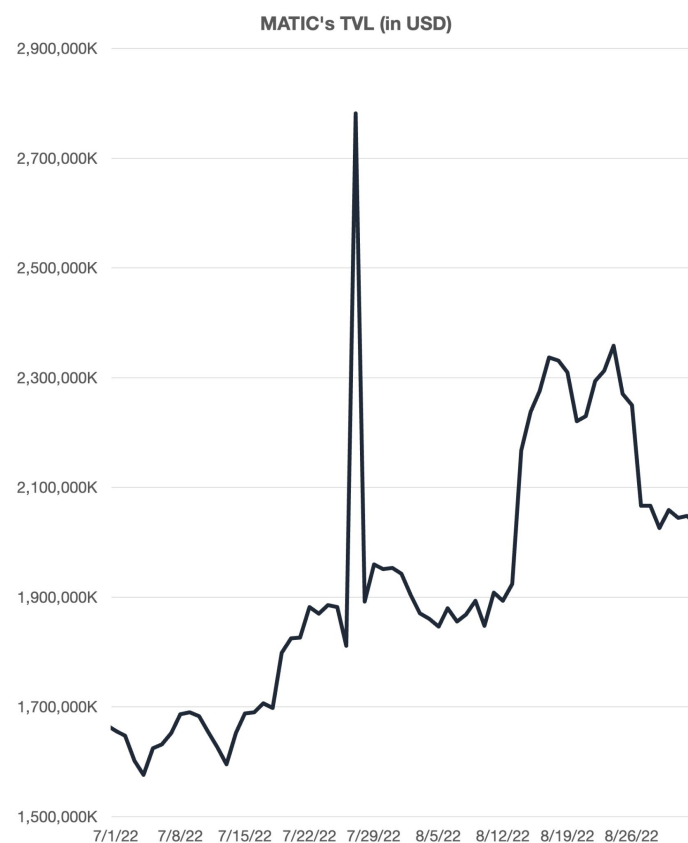
Market breadth was broadly negative for Blockchain Infrastructure Protocols. 6 out of the 7 constituents finished the quarterly rebalance period in negative territory. Furthermore, 4 out of the 7 fell approximately -30% or more, or almost three-times that of the headline index.

Index laggards included LRC, GRT, and SKL, whose token's prices fell -34%, -32%, and -30%, respectively. The indices sole gainer was Polygon's native token, MATIC. Investor sentiment turned bullish on the Layer-2 scaling solution after Ethereum announced their plans to proceed with their Blockchain upgrade. Investors see bullish potential from the highly anticipated switch to Proof-of-Stake (PoS), which is believed to attract more institutional development into the Polygon ecosystem.

Polygon's MATIC Gaining Ground

Polygon's MATIC token has seen an overall uptick in total value locked (or TVL), which measures the summation of user funds deposited in a given protocol. The popular layer-2 scaling solution recently broke above the \$1.7B level, briefly peaking over \$2.7B mark before setting back down into the \$2.1B-2.3B range.

The initial run up started after the timeline announcement for the Ethereum blockchain merge, but has since caught a second-wind as more institutions (Robinhood and Meta) have on-boarded MATIC for native wallet integration. The speed of Polygon's network allows users to reduce costs of transactions on the Ethereum blockchain. Importantly, investors see Ethereum's upcoming merge as being more complimentary to MATIC, as opposed to competitive.



Source: CF Benchmarks LTD., Defillama.com, as of September 1st, 2022

CF Cryptocurrency Ultra Cap 5

ATTRIBUTION ANALYSIS : JUNE 1ST - AUGUST 31ST 2022

The CF Ultra Cap 5 Index

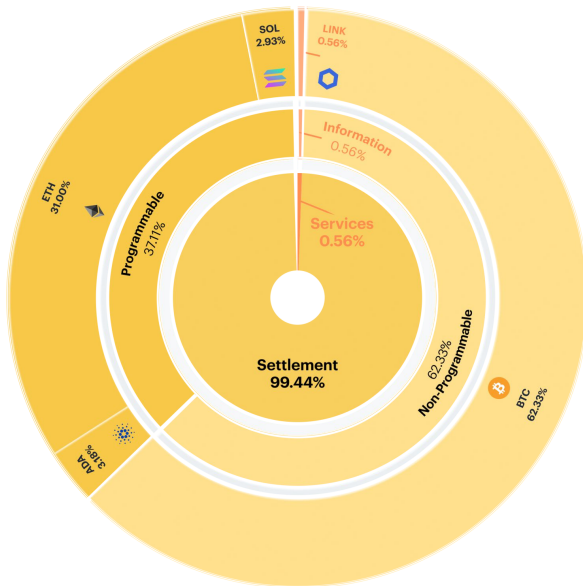
The CF Cryptocurrency Ultra Cap 5 (CFUC5) is an investible benchmark index tracking the performance of a free float market capitalization weighted portfolio of the 5 largest cryptocurrencies by market capitalization. It is the first true measure of the market beta of cryptocurrencies being a Registered 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 August 31st, 2022

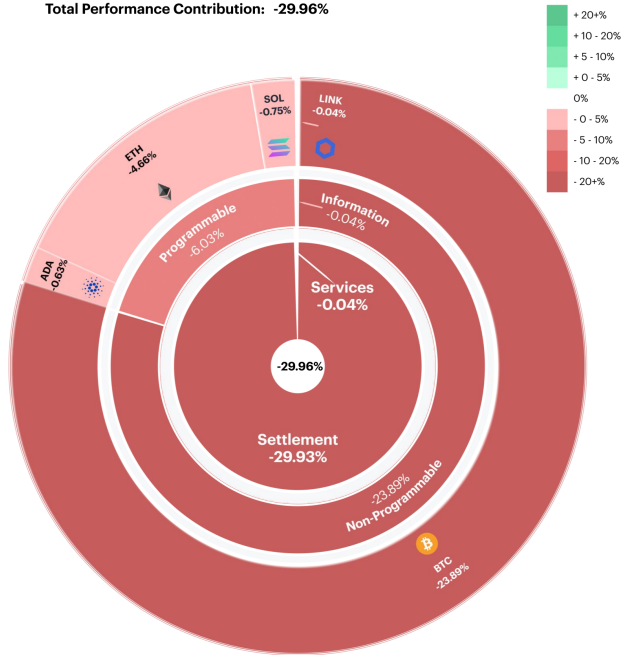
Index Weights

Total Weight: 100%
Index Value: 2915.25



Index Return Contribution

Total Performance Contribution: -29.96%



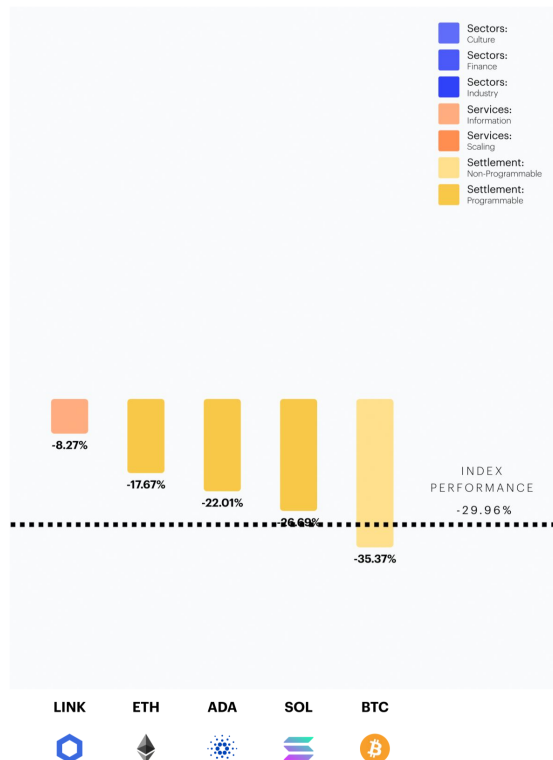
Heavyweight BTC Sinks Bluechips

Our barometer for blue-chip tokens remained under pressure, falling approximately -30% over the last rebalancing period. The composition of the index is heavily concentrated in the Settlement Segment which contributes over 99% of the total weighting.

From a Level 2 Digital Asset Classification Structure (DACS) perspective, the relative performance contribution of the non-programmable segment was 17% worse in absolute terms than the programmable.

Absolute Performance

Index Performance: -29.96%



BTC Dominance Fades

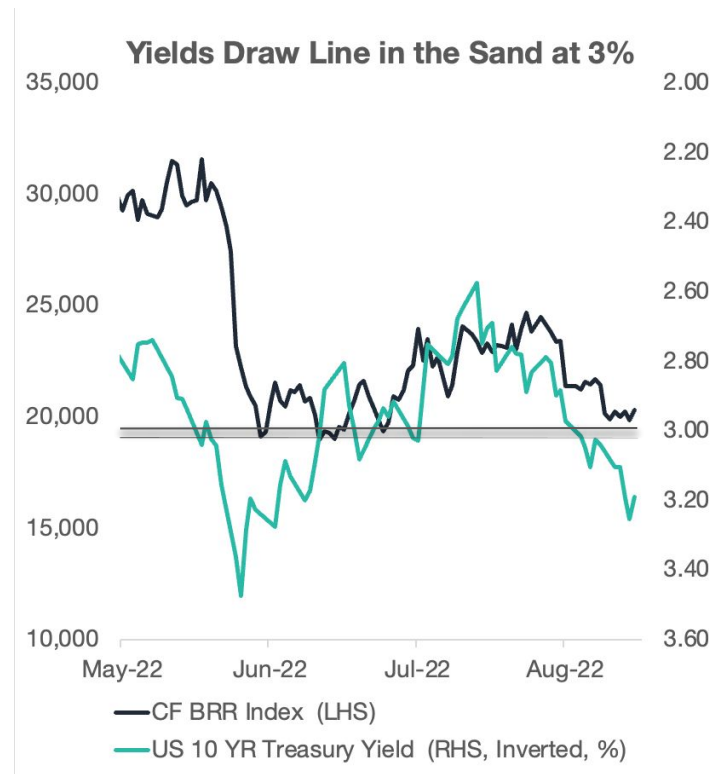
Bitcoin's relative strength faded over the past rebalancing period. In the first half of the year, the world's largest token was outperforming its UC5 peers by margin of +16% to +40%. This performance lead has been reduced significantly over the past three months. The surprise timeline announcement for the Ethereum blockchain merge has even allowed BTC to be overtaken by ETH in the year-to-date performance tables.

Chainlink (LINK) fared the best out of the remaining UC5 peers. Investor demand has been strong at the token's \$6 support level. The second-best performer was ETH as all eyes remain focused on its blockchain's transition over to Proof-of-Stake (POS). This switch is anticipated to enable a series of fundamental bullish features centered around increased efficiency and bandwidth.

Yields Cross Key Level

10-year Treasury rates recently surpassed a key psychological level. Bitcoin, as measured by our BRR Index, represents approximately 60% of our CF Ultra Cap 5 Index and remains a key barometer for crypto. The chart attached illustrates how Bitcoin has historically displayed an increase in pricing volatility - with negative price action - as 10-year rates approach or cross the 300bps mark.

Bitcoin prices have certainly reacted negatively to the most recent 3% crossover, with prices declining from \$25K to the \$20K support levels seen this past June. However, price action was relatively less severe and investor sentiment is noticeably stabilizing much faster. This dynamic of retesting market headwinds with added resilience illustrates how the market may be more comfortable in facing a period of higher rates.



Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 2022

Bitcoin Enters a Seasonally Challenging Month



Bitcoin has historically seen challenging price action in the month of September. Over the course of the last 10 years, the month of September has on average trimmed 3.64% from Bitcoin's value, with the worst monthly drawdown occurring back in 2014. However, it is worth highlighting that September is the only month to average negative price performance over this observation window. Furthermore, the subsequent two months have been seasonally the most fruitful for Bitcoin bulls.

Appendix: Market Performance Overview

Major Crypto-Pairs (USD)

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bitcoin	1.1%	-6.9%	-12.7%	-36.5%	-56.4%	66.39
Ethereum	0.8%	-6.7%	-19.5%	-57.4%	-99.91	99.91
XRP	0.8%	-5.6%	-12.4%	-21.2%	-60.1%	56.56
Litecoin	2.0%	-4.5%	-7.3%	-20.0%	-62.5%	83.50
Dash	-2.4%	-9.9%	-8.8%	-29.4%	-66.4%	79.65
Zcash	-0.7%	-12.4%	-3.4%	-35.0%	-58.4%	94.59
Solana	1.3%	-10.5%	-22.1%	-29.7%	-81.1%	94.84
Avalanche	-1.4%	-17.3%	-16.8%	-26.4%	-82.3%	95.20
Polkadot	0.6%	-7.7%	-13.3%	-31.2%	-73.4%	79.15
Dogecoin	0.3%	-10.4%	-8.7%	-28.0%	-63.6%	84.38
Polygon	2.3%	0.4%	-6.3%	N/A	-66.9%	113.69
Chainlink	1.7%	-7.9%	-11.0%	-10.6%	-65.6%	89.18
Uniswap	0.4%	-13.8%	-24.7%	9.4%	-63.5%	118.40
Algorand	-0.1%	-5.4%	-13.5%	-28.8%	-82.4%	67.22
Cardano	0.5%	-2.2%	-10.6%	-24.3%	-65.3%	72.57
Maker	-1.9%	-10.9%	-26.8%	-41.4%	-66.7%	94.51
Aave	0.4%	-5.0%	-10.0%	-24.6%	-66.2%	116.50
Curve DAO Token	8.9%	-4.0%	-11.0%	-15.9%	-78.2%	124.65
Axie Infinity	5.7%	-2.3%	-17.6%	-37.0%	-84.5%	94.02

Commodities

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bloomberg Commodity Index	-0.8%	-2.5%	1.5%	22.7%	22.7%	25.42
Bloomberg Energy Subindex	-1.0%	-4.3%	3.3%	78.3%	78.3%	45.67
Bloomberg Industrial Metals Subindex	-0.7%	-2.2%	-2.1%	-11.3%	-11.3%	27.15
Bloomberg Precious Metals Subex	-0.9%	-2.8%	-5.6%	-11.5%	-11.5%	15.64
Crude Oil (WTI)	-2.3%	-5.7%	-3.5%	32.1%	32.1%	45.35
Gold (USD per Oz.)	-0.6%	-2.0%	-3.2%	-6.6%	-6.6%	13.57

Equities

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
S&P 500 Index	-0.8%	-4.4%	-3.8%	-16.2%	-16.2%	26.11
NASDAQ 100 Stock Index	-0.6%	-5.0%	-5.1%	-24.4%	-24.4%	34.60
FTSE 100 Index	-1.1%	-2.4%	-0.9%	1.5%	1.5%	17.44
MSCI Europe Index	-1.2%	-3.9%	-4.7%	-11.4%	-11.4%	18.27
MSCI Japan Index	-0.3%	-0.2%	0.1%	-1.0%	-1.0%	16.97
MSCI Emerging Markets Index	0.1%	0.9%	0.3%	-17.3%	-17.3%	18.42
MSCI World Index	-0.7%	-3.9%	-4.2%	-17.3%	-17.5%	21.90
MSCI ACWI Index	-0.6%	-3.4%	-3.7%	-17.5%	-17.5%	20.50

Fixed Income

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
Bloomberg Global Aggregate Bond Index	-0.1%	-0.7%	-4.6%	-15.6%	-15.6%	7.84
Bloomberg Global Aggregate Credit Index	-0.2%	-0.6%	-4.3%	-16.6%	-16.6%	8.10
Bloomberg Global High Yield Index	-0.3%	-1.2%	-2.1%	-14.8%	-14.8%	8.76
Bloomberg US Long-Term Treasury Index	-0.9%	0.5%	-6.5%	-22.7%	-22.7%	18.91
Bloomberg US Short-Term Treasury Index	0.0%	0.0%	0.0%	-0.6%	-0.6%	0.67
Bloomberg Global Inflation-Linked Bond Index	-0.9%	-1.2%	-2.7%	-7.5%	-7.5%	8.81

Fiat Currency Pairs

Name	1 Day	1 Week	1 Month	QTD	YTD	90 D Volatility
DOLLAR INDEX SPOT	-0.1%	0.0%	3.1%	6.8%	13.6%	8.87
EURO/US DOLLAR	0.4%	0.9%	-2.0%	-6.3%	-11.6%	9.75
BRITISH POUND/US DOLLAR	-0.3%	-1.5%	-5.1%	-7.8%	-14.1%	10.81
JAPANESE YEN/US DOLLAR	-0.1%	-1.3%	-5.3%	-7.4%	-17.2%	11.38
US DOLLAR/SWISS FRANC	0.3%	1.1%	2.9%	1.9%	7.1%	9.56
AUSTRALIAN DOLLAR/US DOLLAR	-0.2%	-1.0%	-2.6%	-4.7%	-5.8%	13.49
MEXICAN PESO/US DOLLAR	0.1%	-1.2%	1.1%	-2.4%	1.9%	11.42
BRAZIL REAL/US DOLLAR	-1.2%	-1.4%	0.1%	-8.7%	7.5%	18.00
US DOLLAR/SINGAPORE DOLLAR	-0.1%	0.2%	1.4%	2.0%	3.6%	5.22
TAIWAN DOLLAR/US DOLLAR	0.2%	-0.4%	-1.3%	-4.6%	-8.9%	4.44

Source: CF Benchmarks LTD., Bloomberg LP, as of August 31st, 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 CFs 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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