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CF Benchmarks Quarterly Attribution Report

Attribution Analysis: June 3, 2024 - September 3, 2024

CF DACS
POWERED BY THE CF DIGITAL ASSET CLASSIFICATION STRUCTURE

Market Recap

Market Recap

Crypto's Crossroads: ETFs, Elections, and Economic Enigmas

Digital assets currently find themselves in a paradoxical environment, shaped by continued industry developments, macroeconomic factors, and the potential for a new regulatory regime. Despite progress in curbing inflation and a loosening labor market leading to declining interest rates, a risk-off sentiment has prevailed. Concurrently, institutional adoption reached a new milestone with the launch of spot Ether ETFs in the United States. These regulated products have attracted steady fund flows, highlighting robust interest in this emerging asset class, despite more muted price action. The success of these spot products has even spurred asset managers to explore future opportunities, evidenced by early applications for spot Solana ETFs submitted to the SEC.

Market volatility resurged in the latter half of the rebalance period, primarily triggered by the unwinding of the "Yen Carry Trade," dampening risk appetite across broader markets. On the monetary stage, Federal Reserve officials have led markets to the starting line of the next rate-cutting cycle. Jerome Powell's dovish performance at the August Jackson Hole Symposium helped mitigate some market losses. Crypto prices responded positively to these potential rate-cut signals, benefiting from their perceived inverse relationship with interest rates.

Attention has also pivoted towards the upcoming U.S. elections in November, with market participants carefully scrutinizing potential policy changes that might emerge from a new administration. Notably, former President Trump and various policymakers have endorsed Bitcoin as a potential strategic reserve asset for the U.S. Treasury, underscoring the growing influence of digital assets in the broader economic and political sphere. Digital assets have found advocates across the political spectrum, with pro-crypto Democrats calling for a "reset" with the industry after an adversarial past four years.

The increase in uncertainty led to price action that ultimately reflected the turbulent market conditions described above, with sizable bouts of volatility throughout the most recent rebalance period. The CF Ultra Cap 5 Index led all of our portfolio indices, declining the least at -21.61%, followed closely by the CF Free-Float Broad Cap Index (-23.11%). Conversely, the CF Digital Culture Index emerged as the major laggard, plummeting by -47.32%. The CF Blockchain Infrastructure Index also significantly underperformed, dropping by -44.36%.
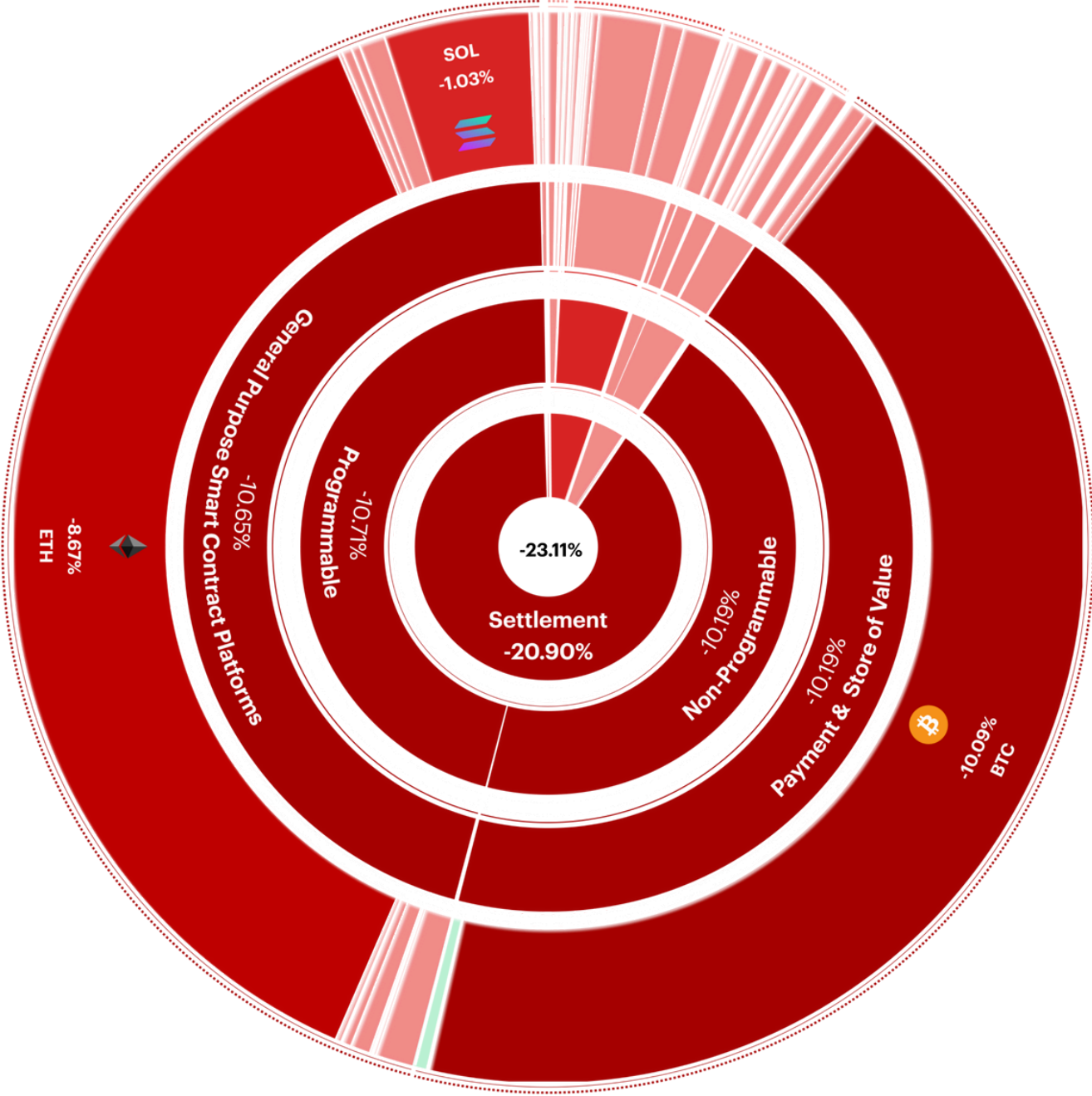
Attribution Analysis:
CF Broad Cap Indices

Performance Attribution (Free Float Market Cap)

Index Return Contribution

Total Performance Contribution: -23.11% **Date:** 3rd September 2024

CATEGORY	SUB-CATEGORY	SEGMENT			
Sectors -1.24%	**Finance** -0.15%	Trading -0.09%		CRV	-0.01%
		Derivatives -0.02%		UNI	-0.08%
		Asset & Wealth Management -0.03%		SNX	-0.02%
				LDO	-0.03%
		Borrowing & Lending +0.02%		AAVE	+0.02%
		Stablecoin Issuance & Mgmt -0.03%		MKR	-0.03%
	Culture -1.09%	Gaming -0.09%		AXS	-0.02%
				GALA	-0.04%
				MANA	-0.01%
		VR & AR -0.03%		SAND	-0.02%
		Social -0.04%		APE	-0.02%
				CHZ	-0.02%
				BONK	-0.05%
		Meme Coins -0.93%		DOGE	-0.45%
				PEPE	-0.15%
				SHIB	-0.28%
Services -0.97%	**Infrastructure** -0.69%	Scaling -0.43%		ARB	-0.15%
				IMX	-0.03%
				MATIC	-0.15%
				OP	-0.06%
				TIA	-0.05%
		Interoperability -0.02%		QNT	-0.02%
		Computing -0.24%		FET	-0.14%
				RNDR	-0.10%
				STX	-0.03%
	Utility -0.29%	Oracles -0.20%		LINK	-0.20%
		Information & Data Management -0.09%		FIL	-0.04%
				GRT	-0.04%
Settlement -20.90%	**Programmable** -10.71%	General Purpose Smart Contract Platforms -10.65%		ADA	-0.27%
				ALGO	-0.02%
				APT	-0.01%
				ATOM	-0.02%
				AVAX	-0.14%
				DOT	-0.07%
				EOS	-0.01%
				ETC	-0.04%
				ETH	-8.67%
				FTM	-0.03%
				HBAR	-0.07%
				ICP	-0.06%
				NEAR	-0.18%
				SOL	-1.03%
				SUI	-0.03%
				XTZ	-0.01%
		Specialized Purpose Smart Contract Platforms -0.06%		EGLD	-0.01%
				INJ	-0.03%
				SEI	-0.03%
	Non-Programmable -10.19%	Payment & Store of Value -10.19%		BCH	-0.12%
				LTC	-0.07%
				BTC	-10.09%
				XLM	-0.01%
				XRP	+0.11%

- The CF Broad Cap Index fell by -23.11% over the most recent rebalancing period, slightly outperforming the diversified weighted variant by approximately 300 basis points.

- The two bellwether tokens, Bitcoin (BTC) and Ether (ETH), contributed the most to the overall decline in performance (-10.09% and -8.67%, respectively).

- From a CF DACS perspective, this translated into the Settlement category contributing the most to the negative performance, with the total contributions split fairly evenly between the programmable and non-programmable subcategories.

Source: CF Benchmarks, as of September 3, 2024

Index Weights (Free Float Market Cap)

3rd June 2024

Total Weight: 100%   **Index Value:** 2920.48

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 2.93%	Finance 0.48%	Trading 0.23%	CRV 0.02%
		Derivatives 0.03%	UNI 0.21%
		Asset & Wealth Management 0.05%	SNX 0.03%
		Borrowing & Lending 0.07%	LDO 0.05%
		Stablecoin Issuance & Mgmt 0.10%	AAVE 0.07%
			MKR 0.10%
	Culture 2.44%	Gaming 0.17%	AXS 0.06%
			GALA 0.06%
		VR & AR 0.07%	MANA 0.03%
			SAND 0.03%
		Social 0.07%	APE 0.03%
			CHZ 0.03%
		Meme Coins 2.13%	BONK 0.10%
			DOGE 1.14%
			PEPE 0.30%
			SHIB 0.60%
Services 2.14%	Infrastructure 1.49%	Scaling 0.93%	ARB 0.26%
			IMX 0.06%
			MATIC 0.35%
			OP 0.14%
			TIA 0.07%
		Interoperability 0.06%	QNT 0.06%
		Computing 0.50%	FET 0.31%
			RNDR 0.19%
			STX 0.11%
	Utility 0.66%	Oracles 0.47%	LINK 0.47%
		Information & Data Management 0.18%	FIL 0.10%
			GRT 0.08%
Settlement 94.93%	Programmable 32.19%	General Purpose Smart Contract Platforms 32.05%	ADA 0.94%
			ALGO 0.06%
			APT 0.03%
			ATOM 0.03%
			AVAX 0.36%
			DOT 0.16%
			EOS 0.02%
			ETC 0.11%
			ETH 24.47%
			FTM 0.05%
			HBAR 0.13%
			ICP 0.15%
			NEAR 0.38%
			SOL 4.96%
			SUI 0.12%
			XTZ 0.04%
			EGLD 0.02%
		Specialized Purpose Smart Contract Platforms 0.15%	INJ 0.09%
			SEI 0.06%
	Non-Programmable 62.74%	Payment & Store of Value 62.74%	BCH 0.37%
			LTC 0.33%
			BTC 60.55%
			XLM 0.11%
			XRP 1.37%

3rd September 2024

Total Weight: 100%   **Index Value:** 2245.56

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 2.39%	Finance 0.45%	Trading 0.18%	UNI 0.18%
		Asset & Wealth Management 0.03%	LDO 0.03%
		Borrowing & Lending 0.15%	AAVE 0.11%
		Stablecoin Issuance & Mgmt 0.08%	ONDO 0.04%
			MKR 0.08%
	Culture 1.94%	Gaming 0.08%	GALA 0.04%
		VR & AR 0.03%	IMX 0.04%
		Social 0.02%	SAND 0.03%
			CHZ 0.02%
		Meme Coins 1.82%	BONK 0.07%
			DOGE 0.94%
			PEPE 0.21%
			SHIB 0.50%
			WIF 0.10%
Services 1.60%	Infrastructure 1.08%	Scaling 0.66%	ARB 0.16%
			MATIC 0.27%
			OP 0.10%
			STX 0.09%
			TIA 0.03%
		Interoperability 0.05%	QNT 0.05%
		Computing 0.37%	FET 0.19%
			JASMY 0.04%
			RNDR 0.13%
	Utility 0.53%	Oracles 0.39%	LINK 0.39%
		Information & Data Management 0.13%	FIL 0.08%
			GRT 0.05%
Settlement 96.01%	Programmable 25.26%	General Purpose Smart Contract Platforms 25.14%	ADA 0.90%
			ALGO 0.06%
			APT 0.03%
			ATOM 0.02%
			AVAX 0.34%
			DOT 0.14%
			EGLD 0.02%
			EOS 0.02%
			ETC 0.09%
			ETH 18.24%
			FTM 0.04%
			HBAR 0.09%
			ICP 0.13%
			NEAR 0.29%
			SOL 4.57%
			SUI 0.14%
			XTZ 0.04%
		Specialized Purpose Smart Contract Platforms 0.11%	INJ 0.07%
			SEI 0.04%
	Non-Programmable 70.75%	Payment & Store of Value 70.75%	BCH 0.34%
			LTC 0.35%
			BTC 67.91%
			XLM 0.14%
			XRP 2.01%

NB: STX, IMX & EGLD have been reclassified as part of the
CF Digital Asset Classification Structure annual reclassification exercise.

Performance Attribution (Diversified Weight)

Index Return Contribution
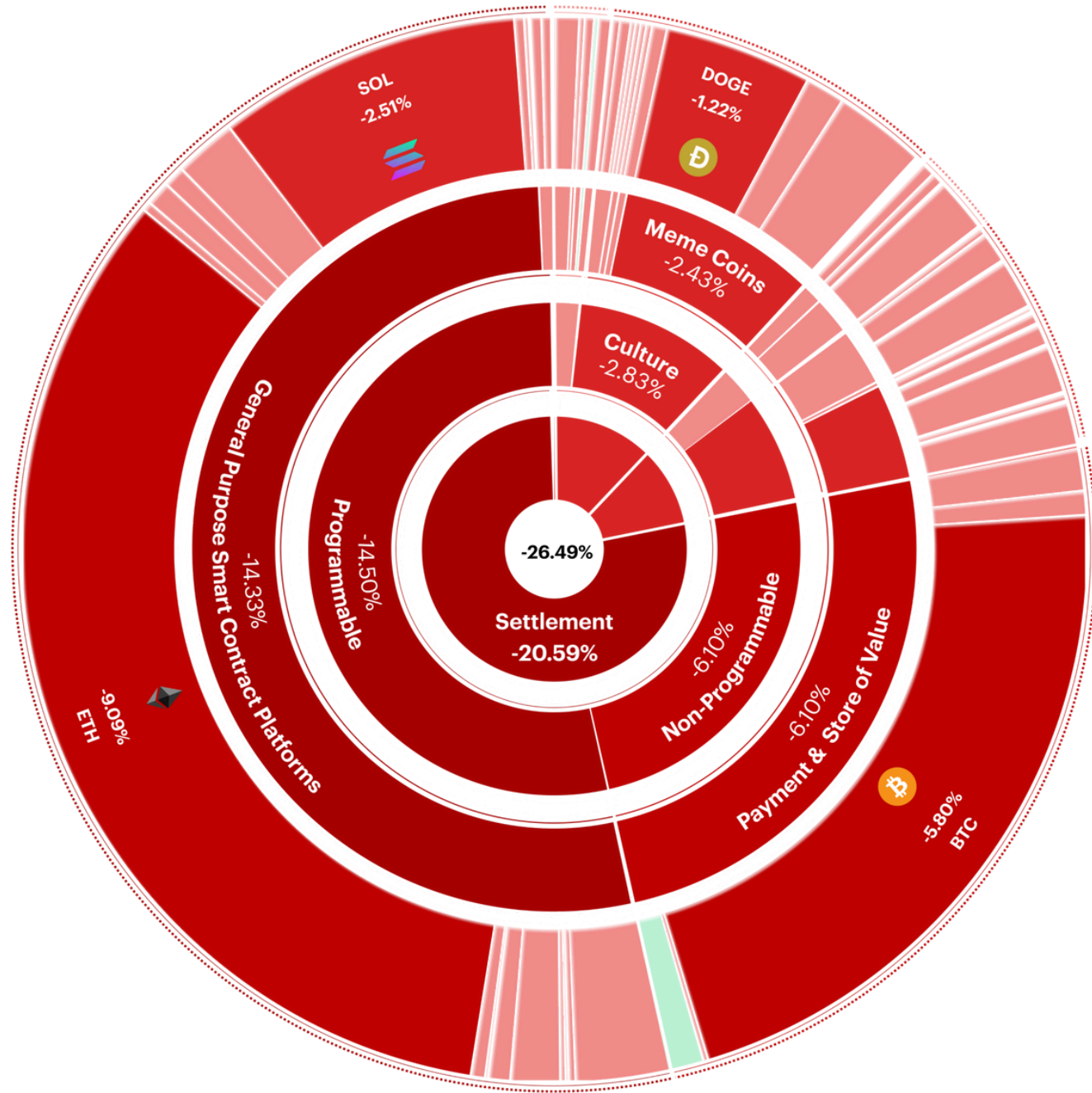
Total Performance Contribution: -26.49%   **Date:** 3rd September 2024

CATEGORY	SUB-CATEGORY	SEGMENT		
Sectors -3.23%	**Finance** -0.41%	Trading -0.22%	CRV	-0.02%
		Derivatives -0.04%	UNI	-0.20%
		Asset & Wealth Management -0.08%	SNX	-0.04%
		Borrowing & Lending +0.04%	LDO	-0.08%
		Stablecoin Issuance & Mgmt -0.11%	AAVE	+0.04%
	Culture -2.83%	Gaming -0.23%	MKR	-0.11%
			AXS	-0.06%
			GALA	-0.09%
		VR & AR -0.08%	MANA	-0.04%
			SAND	-0.04%
		Social -0.09%	APE	-0.05%
			CHZ	-0.05%
		Meme Coins -2.43%	BONK	-0.12%
			DOGE	-1.22%
			PEPE	-0.33%
			SHIB	-0.76%
Services -2.66%	**Infrastructure** -1.93%	Scaling -1.18%	ARB	-0.40%
			IMX	-0.08%
			MATIC	-0.41%
			OP	-0.19%
			TIA	-0.10%
		Interoperability -0.05%	QNT	-0.05%
			FET	-0.43%
		Computing -0.70%	RNDR	-0.27%
			STX	-0.08%
	Utility -0.73%	Oracles -0.49%	LINK	-0.49%
			FIL	-0.11%
		Information & Data Management -0.24%	GRT	-0.13%
Settlement -20.59%	**Programmable** -14.50%	General Purpose Smart Contract Platforms -14.33%	ADA	-0.77%
			ALGO	-0.06%
			APT	-0.02%
			ATOM	-0.04%
			AVAX	-0.41%
			DOT	-0.18%
			EOS	-0.03%
			ETC	-0.12%
			ETH	-9.09%
			FTM	-0.08%
			HBAR	-0.20%
			ICP	-0.18%
			NEAR	-0.51%
			SOL	-2.51%
			SUI	-0.08%
			XTZ	-0.04%
			EGLD	-0.01%
		Specialized Purpose Smart Contract Platforms -0.17%	INJ	-0.09%
			SEI	-0.08%
	Non-Programmable -6.10%	Payment & Store of Value -6.10%	BCH	-0.35%
			LTC	-0.20%
			BTC	-5.80%
			XLM	-0.04%
			XRP	+0.30%

- Our CF Diversified Broad Cap Index posted a -26.49% decrease and saw its relatively smaller-cap tilt result in underperformance when compared to the free-float variant.

- Ether's (ETH) relatively higher weight resulted in it being the leading detractor, contributing over -9.09% in negative performance to the headline index.

- From a CF DACS perspective, the poor performance from both Ether and Bitcoin (BTC) also resulted in the Settlement category being the leading detractor in headline performance.

Index Weights (Diversified Weight)

3rd June 2024

Total Weight: 100%   Index Value: 2500.23

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 7.68%	Finance 1.28%	Trading 0.58%	CRV 0.05%
		Derivatives 0.08%	UNI 0.53%
		Asset & Wealth Management 0.13%	SNX 0.08%
		Borrowing & Lending 0.17%	LDO 0.13%
		Stablecoin Issuance & Mgmt 0.31%	AAVE 0.17%
			MKR 0.31%
	Culture 6.40%	Gaming 0.45%	AXS 0.14%
			GALA 0.15%
		VR & AR 0.18%	MANA 0.09%
		Social 0.16%	SAND 0.09%
			APE 0.09%
			CHZ 0.07%
		Meme Coins 5.62%	BONK 0.25%
			DOGE 3.10%
			PEPE 0.64%
			SHIB 1.62%
Services 5.86%	Infrastructure 4.20%	Scaling 2.60%	ARB 0.73%
			IMX 0.16%
			MATIC 0.96%
			OP 0.43%
			TIA 0.17%
			QNT 0.16%
		Interoperability 0.16%	FET 0.92%
		Computing 1.44%	RNDR 0.52%
			STX 0.31%
	Utility 1.66%	Oracles 1.15%	LINK 1.15%
		Information & Data Management 0.51%	FIL 0.27%
			GRT 0.24%
Settlement 86.45%	Programmable 45.65%	General Purpose Smart Contract Platforms 45.23%	ADA 2.68%
			ALGO 0.16%
			APT 0.07%
			ATOM 0.09%
			AVAX 1.05%
			DOT 0.43%
			EOS 0.06%
			ETC 0.30%
			ETH 25.66%
			FTM 0.15%
			HBAR 0.39%
			ICP 0.44%
			NEAR 1.08%
			SOL 12.15%
			SUI 0.35%
			XTZ 0.11%
			EGLD 0.05%
		Specialized Purpose Smart Contract Platforms 0.42%	INJ 0.25%
			SEI 0.17%
	Non-Programmable 40.81%	Payment & Store of Value 40.81%	BCH 1.07%
			LTC 0.90%
			BTC 34.83%
			XLM 0.31%
			XRP 3.70%

3rd September 2024

Total Weight: 100%   Index Value: 1838

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 6.61%	Finance 1.25%	Trading 0.50%	UNI 0.50%
		Asset & Wealth Management 0.08%	LDO 0.08%
		Borrowing & Lending 0.42%	AAVE 0.29%
		Stablecoin Issuance & Mgmt 0.25%	ONDO 0.13%
			MKR 0.25%
	Culture 5.35%	Gaming 0.21%	GALA 0.10%
		VR & AR 0.07%	IMX 0.11%
		Social 0.04%	SAND 0.07%
			CHZ 0.04%
		Meme Coins 5.03%	BONK 0.21%
			DOGE 2.61%
			PEPE 0.59%
			SHIB 1.36%
			WIF 0.27%
Services 4.24%	Infrastructure 2.85%	Scaling 1.87%	ARB 0.45%
			MATIC 0.80%
			OP 0.26%
			STX 0.25%
			TIA 0.10%
		Interoperability 0.13%	QNT 0.13%
		Computing 0.84%	FET 0.39%
			JASMY 0.13%
			RNDR 0.33%
	Utility 1.40%	Oracles 1.03%	LINK 1.03%
		Information & Data Management 0.37%	FIL 0.23%
			GRT 0.14%
Settlement 89.15%	Programmable 43.36%	General Purpose Smart Contract Platforms 43.05%	ADA 2.53%
			ALGO 0.16%
			APT 0.08%
			ATOM 0.07%
			AVAX 0.90%
			DOT 0.41%
			EGLD 0.05%
			EOS 0.05%
			ETC 0.24%
			ETH 24.39%
			FTM 0.09%
			HBAR 0.25%
			ICP 0.33%
			NEAR 0.81%
			SOL 12.15%
			SUI 0.41%
			XTZ 0.11%
		Specialized Purpose Smart Contract Platforms 0.31%	INJ 0.20%
			SEI 0.11%
	Non-Programmable 45.79%	Payment & Store of Value 45.79%	BCH 0.97%
			LTC 0.92%
			BTC 37.84%
			XLM 0.39%
			XRP 5.66%

NB: STX, IMX & EGLD have been reclassified as part of the
CF Digital Asset Classification Structure annual reclassification exercise.

Widespread Losses Overshadow Isolated Gains

Absolute Performance

Legend:
- Sectors: Finance
- Sectors: Culture
- Sectors: Industry
- Services: Utility
- Services: Infrastructure
- Settlement: Non-Programmable
- Settlement: Programmable

FREE FLOAT INDEX PERFORMANCE: -23.11%

DIVERSIFIED INDEX PERFORMANCE: -26.49%

Values: +21.58%, +7.99%, -12.76%, -16.66%, -20.66%, -22.22%, -23.18%, -24.47%, -28.89%, -30.14%, -32.28%, -32.32%, -32.57%, -32.91%, -34.24%, -35.05%, -35.42%, -36.15%, -37.10%, -38.77%, -38.96%, -39.26%, -39.71%, -41.61%, -41.97%, -42.35%, -42.66%, -42.68%, -43.16%, -43.55%, -43.97%, -44.41%, -46.38%, -46.54%, -46.56%, -46.57%, -46.67%, -47.74%, -48.90%, -50.24%, -50.32%, -50.86%, -51.69%, -51.81%, -51.83%, -53.38%, -54.18%, -55.58%, -57.56%, -61.23%, -61.50%, -64.33%

Tokens: AAVE, XRP, XLM, BTC, SOL, LTC, SUI, STX, ADA, EGLD, APT, XTZ, BCH, QNT, MKR, ALGO, ETH, INJ, UNI, ETC, AVAX, DOGE, ICP, DOT, FIL, LINK, MATIC, EOS, CRV, OP, MANA, AXS, FET, SAND, IMX, SHIB, SEI, NEAR, ATOM, FTM, BONK, PEPE, RNDR, SNX, HBAR, GRT, APE, ARB, LDO, TIA, GALA, CHZ

Constituent performance was even more broadly negative than the prior rebalance period, with only two tokens posting positive results. This translated in both of the bellwether tokens underperforming the headline index. Bitcoin prices fell by over -16%, and Ether's ETF debut was not enough of a catalyst for relative outperformance, resulting in a -35% decline.

Among the gainers, Aave (AAVE), a borrow and lending protocol, rose by over +21% as loan originations surged, bolstering the network's fee generation. Ripple's XRP token rose by +8% after a series of network updates, and a surge in the protocol's Automated Market Maker (AMM) feature boosted bullish sentiment. Chiliz (CHZ) finished the period as the major laggard despite the platform's launch of its Dragon8 hard fork, which is intended to improve the blockchain's tokenomics and establish a sustainable economic framework.

Source: CF Benchmarks, as of September 3, 2024

Crypto Cedes Lead to Gold, Still Edging Out Equities
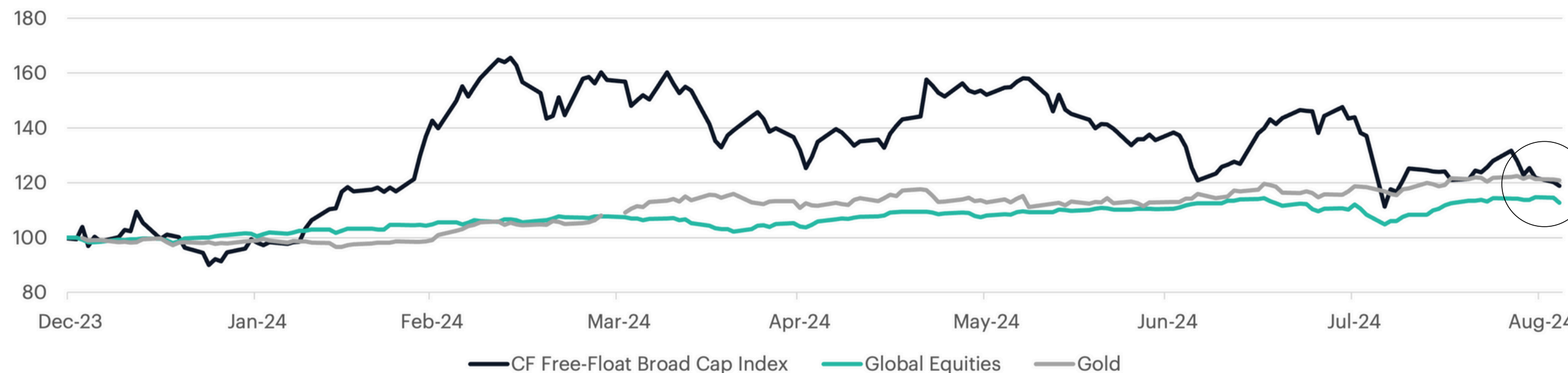
The cryptocurrency market's early-year sprint has hit an unexpected hurdle. The CF Broad Cap Index, once the frontrunner in the asset class race, has been overtaken by a familiar contender: Gold. Despite relinquishing the lead, digital assets may not be out of the game yet. They're still edging out global equities in year-to-date performance. Adding intrigue to this saga is the looming U.S. election in November, casting a shadow of uncertainty over the economic horizon. Market participants might be repositioning for a more volatile election season, anticipating how potential policy shifts could have a sizable impact on the digital asset industry and the overall business environment. Tax policy and tariffs are particularly in focus, as changes in these areas could significantly affect corporate profits and international trade dynamics.

From a monetary standpoint, a rate-cutting cycle by global central banks seems almost certain. This potential monetary pivot could rewrite the rules of engagement for both traditional and digital assets. Lower interest rates typically support non-yielding assets like gold and many cryptocurrencies. Gold often benefits as a safe-haven asset when real yields decline, while digital assets could see increased demand as investors seek alternative stores of value and growth potential in a low-yield environment. As the remainder of the year unfolds, one thing is clear: in the world of risky assets, digital assets may not be the underdog for long. Their resilience and potential for quick rebounds could position them favorably as economic conditions evolve.

Source: CF Benchmarks, Global Equites are represented by the MSCI ACWI Index, Bloomberg, as of September 3, 2024

What's Driving Crypto?

Multi-asset correlations

	Equities												Fixed Income										Currencies, Commodities, and Other									
	S&P 500 INDEX	NASDAQ 100 STOCK INDX	RUSSELL 2000 VALUE IDX	RUSSELL 2000 GROWTH IDX	FTSE 100 INDEX	MSCI EUROPE	MSCI JAPAN	MSCI EM	MSCI WORLD	MSCI ACWI	MSCI ACWI Growth Net USD	MSCI ACWI Value Net USD	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	US Corp BBB/Baa - Treasury 10	DOLLAR INDEX SPOT	Gold Spot $/Oz	Crude Oil (WTI)	BBG Commodity Index	BBG Energy Index	BBG Industrial Metals	BBG Precious Metals	Cboe Volatility Index	Rates Volatility (MOVE) Index	Financial Conditions Index
Average Weekly Correlation over the current rebalance period.	-0.05	-0.09	0.31	0.36	-0.03	0.13	0.03	0.00	0.02	0.02	-0.03	0.11	-0.02	0.05	0.02	-0.01	0.12	-0.08	-0.19	0.09	0.09	0.08	-0.07	-0.07	-0.05	-0.16	-0.03	-0.25	-0.10	0.10	-0.01	-0.19
Average Weekly Correlation over the prior rebalance period.	0.08	0.09	0.19	0.38	-0.05	0.23	0.11	0.14	0.15	0.16	0.19	0.06	-0.02	-0.08	-0.12	-0.15	0.10	-0.16	-0.33	0.20	0.12	0.16	-0.13	0.06	0.11	-0.03	0.08	-0.24	0.01	-0.05	0.05	0.08

Our multi-asset correlation matrix provides valuable insights for investors seeking to construct well-diversified portfolios. By comparing the correlation structures across the current and prior rebalance periods, we can identify notable shifts in asset relationships. Notably, the correlation between major equity indices like the S&P 500 and Nasdaq 100 with crypto assets (represented by the CF Free-Float Broad Cap Index) has turned negative in the current period, suggesting a potential decoupling. The average weekly correlation of the CF Free-Float Broad Cap Index with the S&P 500 and Nasdaq has decreased from 0.08 and 0.09 in the prior period to -0.05 and -0.09 in the current period, respectively. Interestingly, crypto's relationship with some fixed income assets has strengthened, showing positive correlations with several US Treasury indices. However, correlations with currencies and commodities remain generally low or negative. This shift suggests that crypto is moving more independently from equity markets while showing some alignment with fixed income trends. The negative correlation with equities could enhance crypto's potential diversification benefits within multi-asset portfolios.

Source: CF Benchmarks, Bloomberg, total return indices are referenced in USD, as of August 31, 2024

cf benchmarks
a kraken company

Attribution Analysis:
CF Cryptocurrency Ultra Cap 5 Index

Crypto's Heavyweight Champions Falter

Index Return Contribution

Total Performance Contribution: -21.61%   **Date:** 3rd September 2024

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Settlement	Programmable -10.80%	General Purpose Smart Contract Platforms -10.80%	ADA -0.29%
			ETH -9.39%
			SOL -1.11%
	Non-Programmable -10.81%	Payment & Store of Value -10.81%	BTC -10.93%
-21.61%			XRP +0.12%

- Mega-cap tokens, as measured by our CF Cryptocurrency Ultra Cap 5 index, experienced a sizable decline in value over the most recent rebalance period, falling by -21.61%.

- From a CF Digital Asset Classification Structure (DACS) perspective, the index is fully allocated to the Settlement category. Performance is primarily driven by the dominant positions of Bitcoin and Ether. Despite its more modest weighting, the General Purpose Smart Contract sub-category underperformed relative to the Payments & Store of Value sub-category, which resulted in a nearly equal contribution in negative performance.

Source: CF Benchmarks, as of September 3 2024

Index Weights

3rd June 2024

Total Weight: 100%   **Index Value:** 8724.41

CATEGORY	SUB-CATEGORY		SEGMENT		ASSET	
Settlement	Programmable	32.91%	General Purpose Smart Contract Platforms	32.91%	ADA	1.02%
					ETH	26.52%
					SOL	5.38%
	Non-Programmable	67.09%	Payment & Store of Value	67.09%	BTC	65.61%
100%					XRP	1.48%

3rd September 2024

Total Weight: 100%   **Index Value:** 6839.43

CATEGORY	SUB-CATEGORY		SEGMENT		ASSET	
Settlement	Programmable	25.32%	General Purpose Smart Contract Platforms	25.32%	ADA	0.96%
					ETH	19.48%
					SOL	4.88%
	Non-Programmable	74.68%	Payment & Store of Value	74.68%	BTC	72.53%
100%					XRP	2.15%

Ripple's XRP Bucks the Trend

Absolute Performance
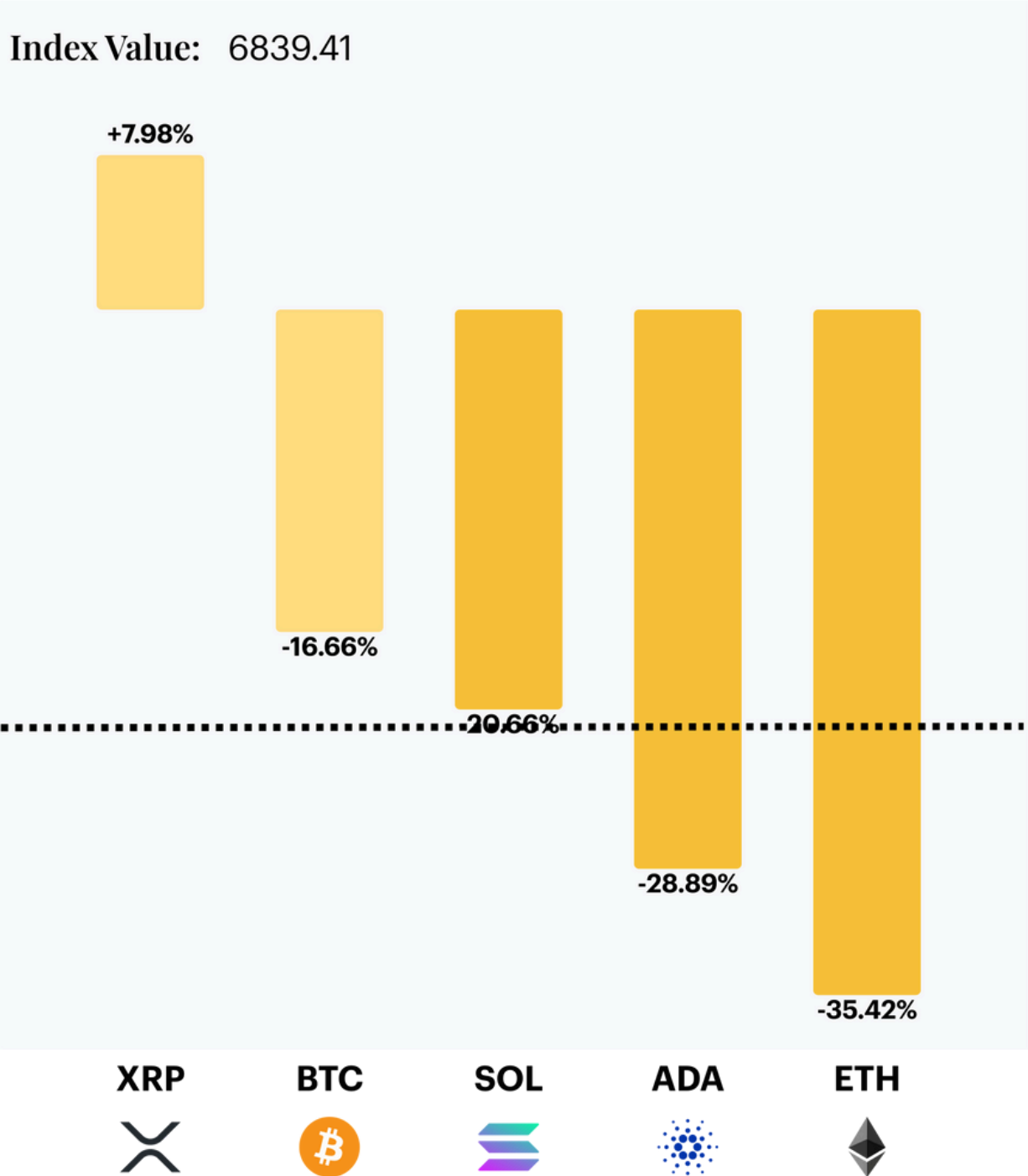
Index Value: 6839.41

Legend:
- Sectors: Finance
- Sectors: Culture
- Sectors: Industry
- Services: Utility
- Services: Infrastructure
- Settlement: Non-Programmable
- Settlement: Programmable

XRP +7.98%
BTC -16.66%
SOL -20.66%
ADA -28.89%
ETH -35.42%

INDEX PERFORMANCE: -21.61%

Our CF Ultra Cap Index witnessed broadly negative price action across its constituents. Ripple's XRP token outperformed its blue-chip peers and was the only token to finish the rebalance period in positive territory (+7.98%). The blockchain, popularly used for cross-border payments and Central Bank Digital Currency (CBDC) management, showed relative strength after network activity surged on its Automated Market Maker (AMM) platform. This led to an increase in fee generation and open interest. Ripple announced plans to launch a native lending protocol along with an Ethereum Virtual Machine (EVM) side chain to integrate into the DeFi ecosystem.

The overall negative market performance for our CF Ultra Cap 5 Index was predominantly driven by Bitcoin (BTC) and Ether (ETH). Ether, the second-largest digital asset by market capitalization, fell by over 35%, underperforming its larger peer, Bitcoin, by almost 20%, and its General Purpose Smart Contract competitor, Solana (SOL), by approximately 15%. This relative underperformance occurred despite the strong demand for Spot Ether ETFs since their launch in July.

Source: CF Benchmarks, as of September 3 2024

ETH/BTC Ratio Hits Multi-Year Lows

Spot Bitcoin ETFs Launch

Yen-Carry Trade Unwind

SEC Approves 19b-4 Forms for Spot Ether ETFs

- - - CF Ultra Cap 5 Index (Rolling 30-day Volatility), LHS
—— CME CF ETH/BTC Ratio (Generic 1st-Month Futures Contract), RHS

Source: CF Benchmarks, Bloomberg, as of September 4, 2024
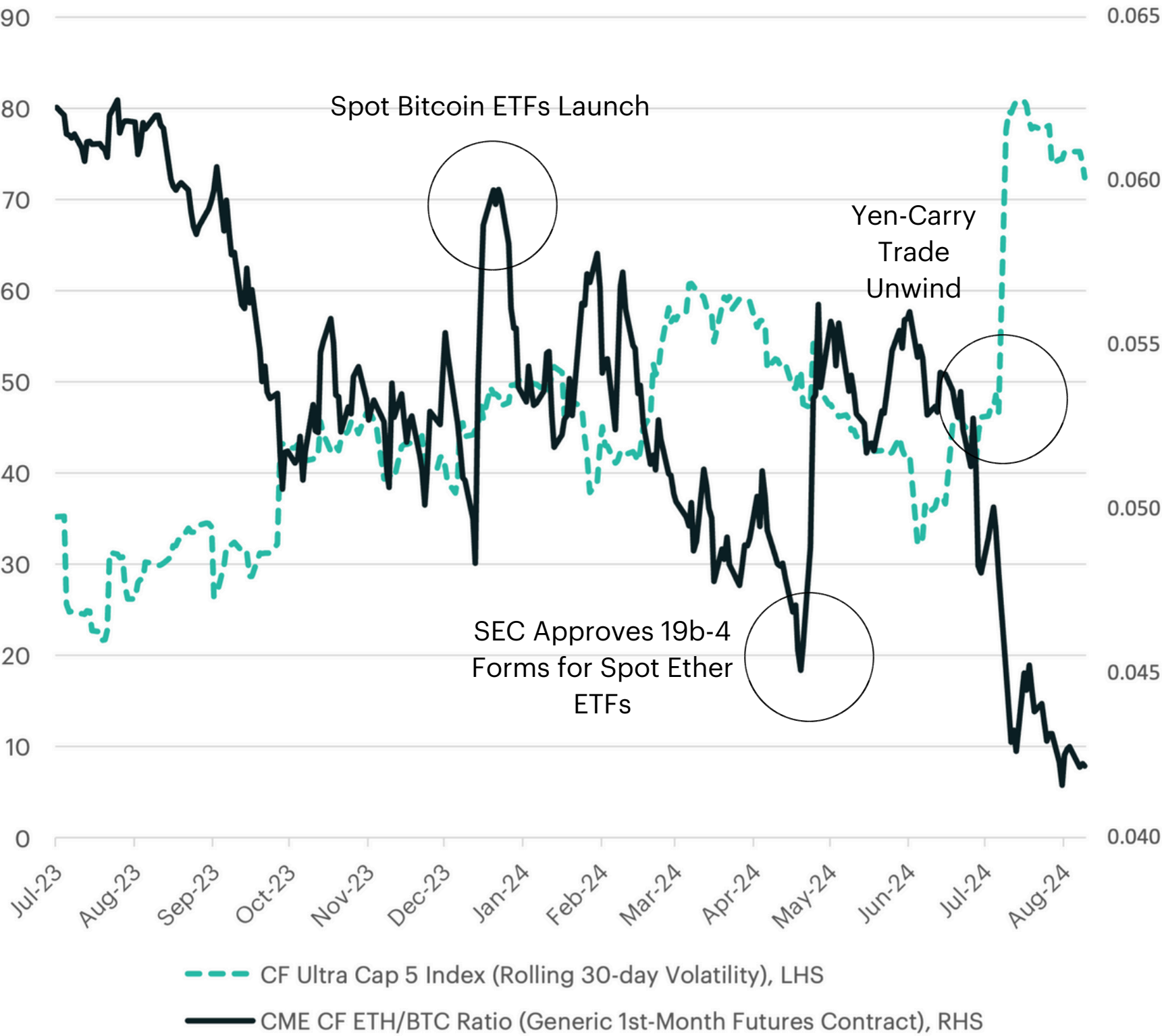
The Ether to Bitcoin price ratio (ETH/BTC ratio) recently plummeted below its pre-Ether ETF approval lows from May, now residing at levels not seen since spring 2021. This decline reflects a broader risk-off sentiment in the crypto market, initially triggered by the unwinding of the "yen carry trade" and exacerbated by growing concerns of a potential "hard landing" or significant economic slowdown.

In risk-off environments, Bitcoin often outperforms Ether due to its perceived status as "digital gold" and its relatively more established store of value. This flight to perceived safety pushes the ETH/BTC ratio lower, as we're currently witnessing. Our chart illustrates this trend, tracking the CME CF ETH/BTC Ratio against the CF Ultra Cap 5 Index's rolling 30-day volatility. Other notable events, such as the Spot Bitcoin ETFs launch in January 2024 and the SEC's approval of Spot Ether ETFs in May 2024, caused significant fluctuations in the ratio. However, the overall downward trajectory has persisted, pushing the ratio to multi-year lows around 0.040.

In this regard, the volatility of our CF Ultra Cap 5 Index has shown an inverse relationship with the ETH/BTC ratio at times, particularly spiking as the ratio sharply declined in August. This suggests that market turbulence and macro forces are now disproportionately affecting Ether's value relative to Bitcoin.

Attribution Analysis:
CF Diversified Large Cap Index

Programmables Let Down Large-caps

Index Return Contribution

Total Performance Contribution: -25.08%   **Date:** 3rd September 2024

CATEGORY		SUB-CATEGORY		SEGMENT			
Sectors -2.40%		Finance	-0.22%	Trading	-0.22%	UNI	-0.22%
						DOGE	-1.35%
		Culture	-2.18%	Meme Coins	-2.18%	SHIB	-0.84%
						ARB	-0.45%
Services -1.44%		Infrastructure	-0.90%	Scaling	-0.90%	MATIC	-0.45%
						LINK	-0.54%
		Utility	-0.54%	Oracles	-0.54%	ADA	-0.86%
Settlement -21.24%						AVAX	-0.45%
						DOT	-0.20%
		Programmable	-14.65%	General Purpose Smart Contract Platforms	-14.65%	ETH	-9.84%
						NEAR	-0.57%
						SOL	-2.74%
						BCH	-0.39%
						LTC	-0.22%
		Non-Programmable	-6.59%	Payment & Store of Value	-6.59%	BTC	-6.27%
						XLM	-0.04%
						XRP	+0.33%

- Large-cap tokens delivered their worst quarterly rebalance performance since December 2022, with the Diversified Large Cap Index posting a -25.08% decrease in index value. Ether's larger weight and relatively weak performance resulted in it being the largest detractor to index value.

- From a CF DACS perspective, this resulted in the General Purpose Smart Contract Platforms category contributing over 14.65% to the decline of the headline index.

Source: CF Benchmarks, as of September 3, 2024

Index Weights

3rd June 2024

Total Weight: 100%   **Index Value:** 749.67

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Sectors **5.81%**	Finance 0.59%	Trading 0.59%	UNI	0.59%
	Culture 5.22%	Meme Coins 5.22%	DOGE	3.43%
			SHIB	1.79%
Services **3.13%**	Infrastructure 1.86%	Scaling 1.86%	ARB	0.80%
			MATIC	1.06%
	Utility 1.27%	Oracles 1.27%	LINK	1.27%
Settlement **91.06%**	Programmable 46.82%	General Purpose Smart Contract Platforms 46.82%	ADA	2.96%
			AVAX	1.15%
			DOT	0.48%
			ETH	27.79%
			NEAR	1.19%
			SOL	13.24%
	Non-Programmable 44.24%	Payment & Store of Value 44.24%	BCH	1.19%
			LTC	1.00%
			BTC	37.63%
			XLM	0.34%
			XRP	4.09%

3rd September 2024

Total Weight: 100%   **Index Value:** 561.65

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Sectors **4.92%**	Finance 0.55%	Trading 0.55%	UNI	0.55%
	Culture 4.38%	Meme Coins 4.38%	DOGE	2.88%
			SHIB	1.50%
Services **2.51%**	Infrastructure 1.37%	Scaling 1.37%	ARB	0.49%
			MATIC	0.88%
	Utility 1.13%	Oracles 1.13%	LINK	1.13%
Settlement **92.57%**	Programmable 43.37%	General Purpose Smart Contract Platforms 43.37%	ADA	2.79%
			ETH	26.46%
			NEAR	0.90%
			SOL	13.23%
	Non-Programmable 49.20%	Payment & Store of Value 49.20%	BCH	1.07%
			LTC	1.01%
			BTC	40.87%
			XRP	6.24%

ARB & NEAR Lead Downward Sprial

Absolute Performance

Index Value: 561.66

Legend:
- Sectors: Finance
- Sectors: Culture
- Sectors: Industry
- Services: Utility
- Services: Infrastructure
- Settlement: Non-Programmable
- Settlement: Programmable

Token	Performance
XRP	+7.99%
XLM	-12.76%
BTC	-16.66%
SOL	-20.66%
LTC	-22.23%
ADA	-28.89%
BCH	-32.57%
ETH	-35.42%
UNI	-37.10%
AVAX	-38.96%
DOGE	-39.26%
DOT	-41.61%
LINK	-42.35%
MATIC	-42.66%
SHIB	-46.57%
NEAR	-47.74%
ARB	-55.58%

INDEX PERFORMANCE: -25.08%
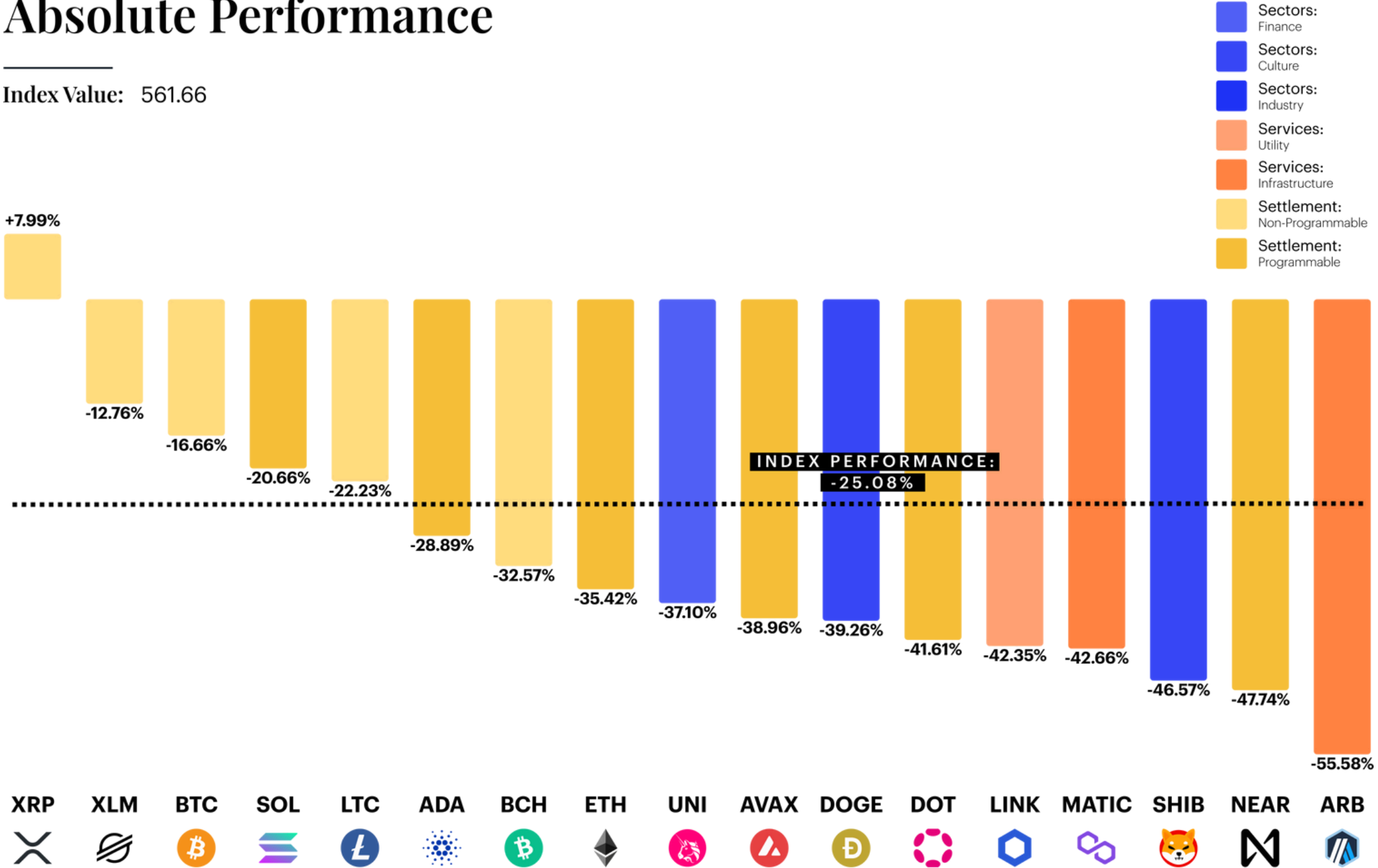
Our Large Cap token gauge witnessed broad negative performance, with only one of its constituents, Ripple's XRP Token, finishing in positive territory. The headline index fell by over 25%, experiencing its most negative quarter in almost 2 years.

Arbitrum's ARB token and Near Protocol's NEAR token finished the rebalance period as the major laggards, declining by -55.58% and -47.74%, respectively. Arbitrum experienced a significant drop in network metrics, along with a decrease in user activity. This decline was compounded by anticipation of the large token unlock event in July, which increased circulating supply and added further selling pressure to the market. Meanwhile, AI-related tokens, including NEAR, experienced an increase in bearish sentiment after network activity dropped. This led to lower transaction fees and overall revenue, which put downward pressure on the token's value.

Dencun's Domino Effect

Ethereum Fees

Average Transactions Per Second (TPS)

Legend: ■ Ethereum ■ Optimism ■ Arbitrum ■ Base ■ Zksync ■ Zora

Source: CF Benchmarks, dune.com, as of August 31, 2024
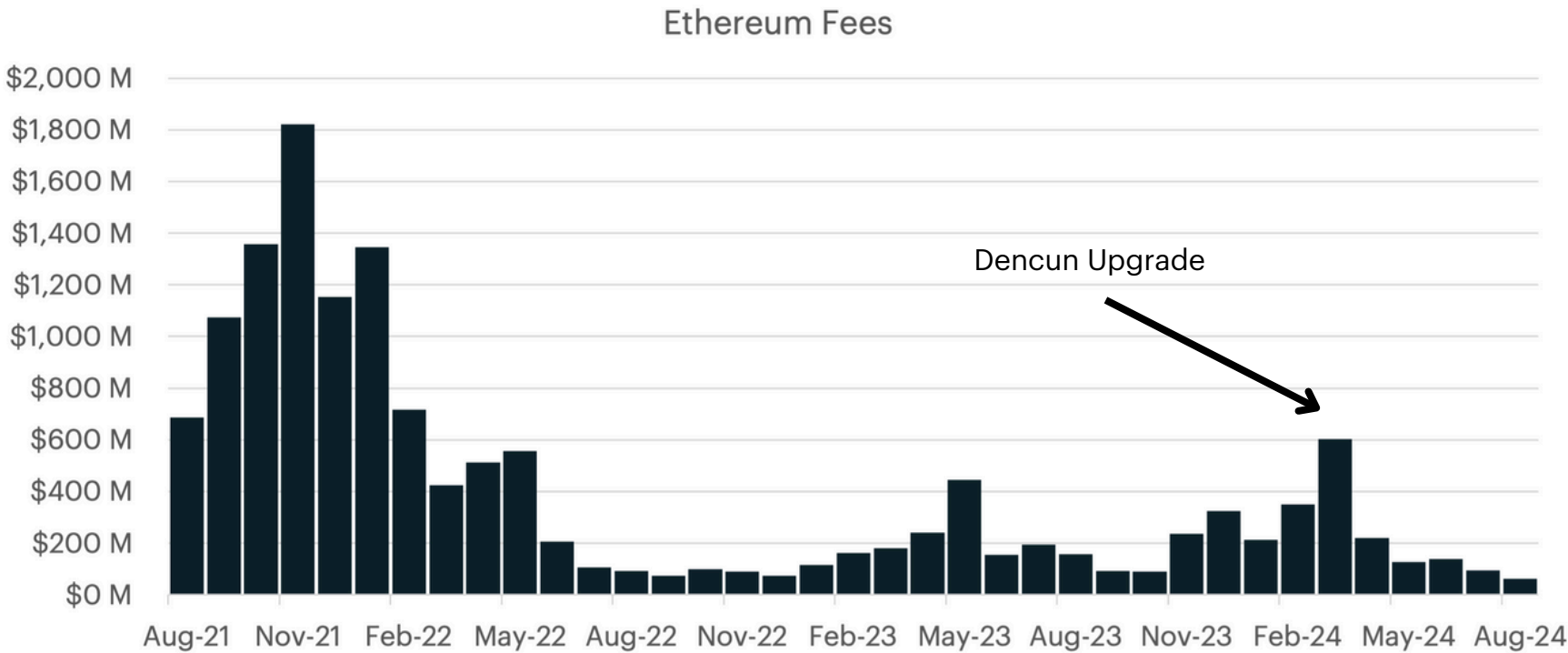
Ethereum's price performance has surprisingly underwhelmed despite the July 2024 launch of spot ETFs. The Dencun upgrade, introduced in March, has become a game-changer for Layer-2 (L2) networks. On-chain data reveals a significant shift in transaction activity. The Dencun upgrade, Ethereum's latest evolutionary step introduced in March, has become a game-changer - but not in the way many predicted. This upgrade, with its innovative "blob" technology, has inadvertently become a catalyst for a L2 renaissance. Networks like Optimism and Arbitrum are now processing transactions at a fraction of their previous costs, leading to a dramatic surge in their transaction per second (TPS) rates.
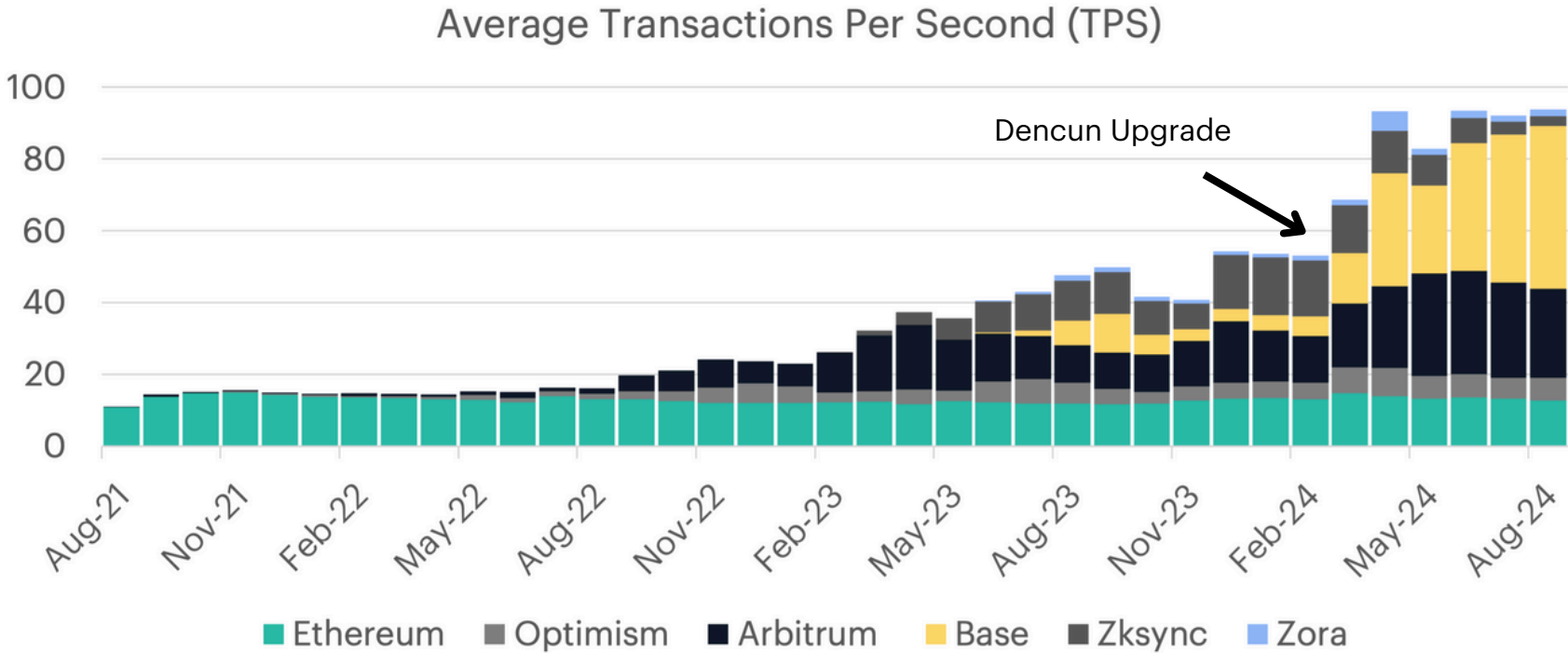
However, this L2 boom has come at a fundamental cost to Ethereum's main network. Fees on the primary chain have plummeted to unprecedented lows, rekindling a downward trajectory that began in early 2022. This shift has ignited fierce competition among L2 networks, each vying to offer the most attractive fee structure. Meanwhile, in an interesting contrast, Solana is carving its own path. Despite - or perhaps because of - its high throughput and minimal transaction costs, Solana is seeing an uptick in fee generation. These developments point to a broader, more profound trend in the blockchain world. Scalability and cost-efficiency are no longer just buzzwords; they're becoming the cornerstones of successful blockchain ecosystems.

Attribution Analysis:
CF DeFi Composite Index

Trading Segment Weighs on DeFi Index

Index Return Contribution

Total Performance Contribution: -32.85%   **Date:** 3rd September 2024
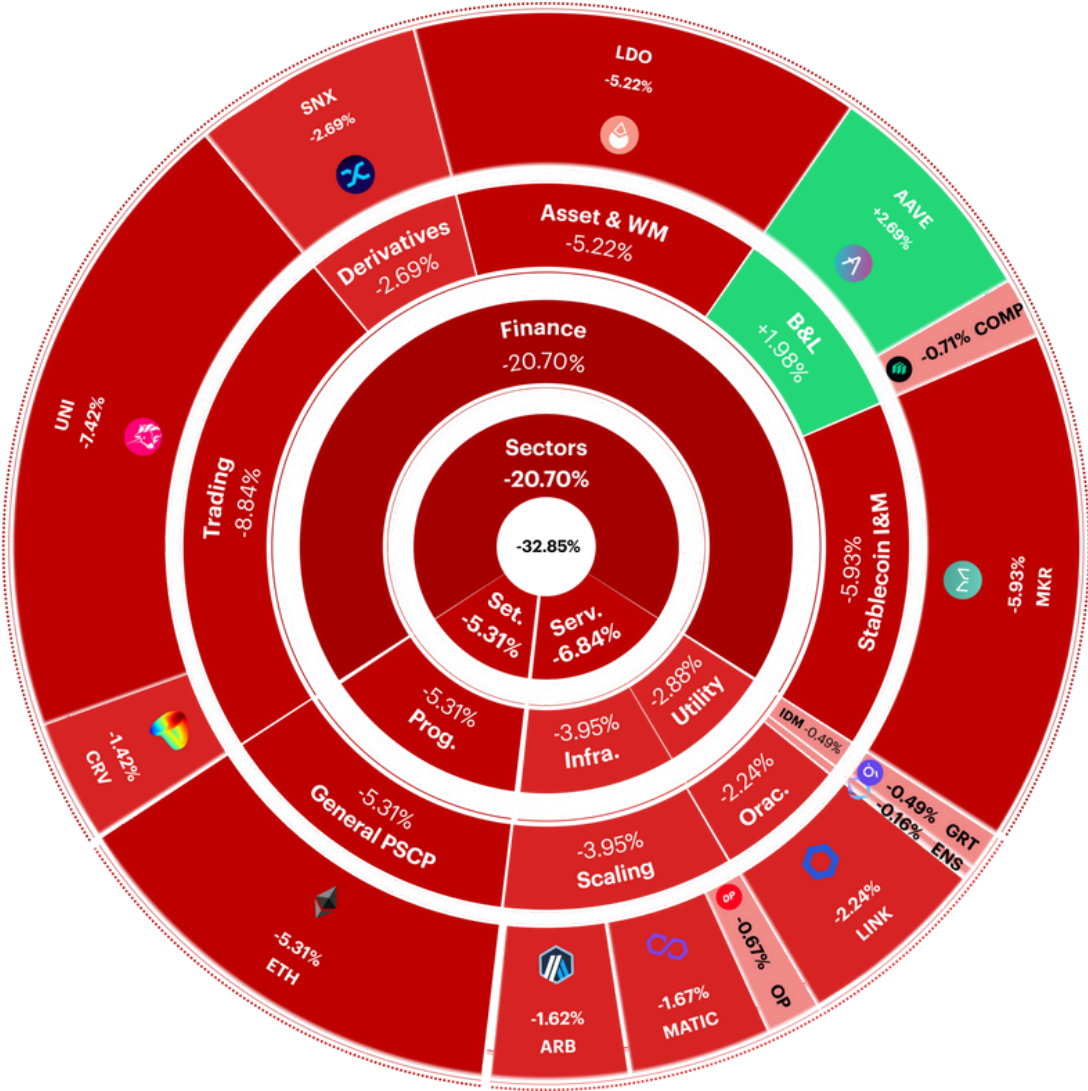
CATEGORY	SUB-CATEGORY		SEGMENT		ASSET	
Sectors -20.70%	Finance	-20.70%	Trading	-8.84%	CRV	-1.42%
					UNI	-7.42%
			Derivatives	-2.69%	SNX	-2.69%
			Asset & Wealth Management	-5.22%	LDO	-5.22%
			Borrowing & Lending	+1.98%	AAVE	+2.69%
					COMP	-0.71%
			Stablecoin Issuance & Mgmt	-5.93%	MKR	-5.93%
Services -6.84%	Infrastructure	-3.95%	Scaling	-3.95%	ARB	-1.62%
					MATIC	-1.67%
					OP	-0.67%
	Utility	-2.88%	Oracles	-2.24%	LINK	-2.24%
			Identity	-0.16%	ENS	-0.16%
			Information & Data Management	-0.49%	GRT	-0.49%
Settlement -5.31%	Programmable	-5.31%	General Purpose Smart Contract Platforms	-5.31%	ETH	-5.31%

- Over the past three months, our CF DeFi Composite Index declined by -32.85%, with Uniswap's (UNI) token holding the largest weighting and detracting -7.42% from the total return of the headline index.

- In terms of segment classification, the substantial weight of UNI translated to the Trading segment detracting the most from the index. Other finance-related tokens, notably MKR and LDO, accounted for approximately -11% of the quarterly drawdown.

Source: CF Benchmarks, as of September 3 2024

Index Weights

3rd June 2024

Total Weight: 100%   Index Value: 414.97

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Sectors		Trading 23.29%	CRV	3.29%
			UNI	20.00%
		Derivatives 5.19%	SNX	5.19%
	Finance 70.00%	Asset & Wealth Management 9.07%	LDO	9.07%
		Borrowing & Lending 15.14%	AAVE	12.46%
			COMP	2.68%
70.00%		Stablecoin Issuance & Mgmt 17.31%	MKR	17.31%
Services			ARB	2.91%
	Infrastructure 8.36%	Scaling 8.36%	MATIC	3.91%
			OP	1.53%
		Oracles 5.28%	LINK	5.28%
	Utility 6.64%	Identity 0.45%	ENS	0.45%
15.00%		Information & Data Management 0.92%	GRT	0.92%
Settlement 15.00%	Programmable 15.00%	General Purpose Smart Contract Platforms 15.00%	ETH	15.00%

3rd September 2024

Total Weight: 100%   Index Value: 278.67

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Sectors		Trading 20.00%	UNI	20.00%
		Derivatives 3.86%	SNX	3.86%
		Asset & Wealth Management 5.31%	LDO	5.31%
	Finance 70.00%	Borrowing & Lending 26.25%	AAVE	18.65%
			ONDO	7.60%
70.00%		Stablecoin Issuance & Mgmt 14.59%	MKR	14.59%
Services			ARB	2.33%
	Infrastructure 7.88%	Scaling 7.88%	MATIC	4.04%
			OP	1.51%
		Oracles 5.82%	LINK	5.82%
	Utility 7.12%	Identity 0.52%	ENS	0.52%
15.00%		Information & Data Management 0.78%	GRT	0.78%
Settlement 15.00%	Programmable 15.00%	General Purpose Smart Contract Platforms 15.00%	ETH	15.00%

cfb
a kraken company

AAVE Shines in a Challenging Quarter for DeFi

Absolute Performance

Index Value: 278.67

Legend:
- Sectors: Finance
- Sectors: Culture
- Sectors: Industry
- Services: Utility
- Services: Infrastructure
- Settlement: Non-Programmable
- Settlement: Programmable

Token	Performance
AAVE	+21.58%
COMP	-26.32%
MKR	-34.24%
ENS	-35.27%
ETH	-35.42%
UNI	-37.10%
LINK	-42.35%
MATIC	-42.66%
CRV	-43.16%
OP	-43.55%
SNX	-51.81%
GRT	-53.38%
ARB	-55.58%
LDO	-57.56%

INDEX PERFORMANCE: -32.85%
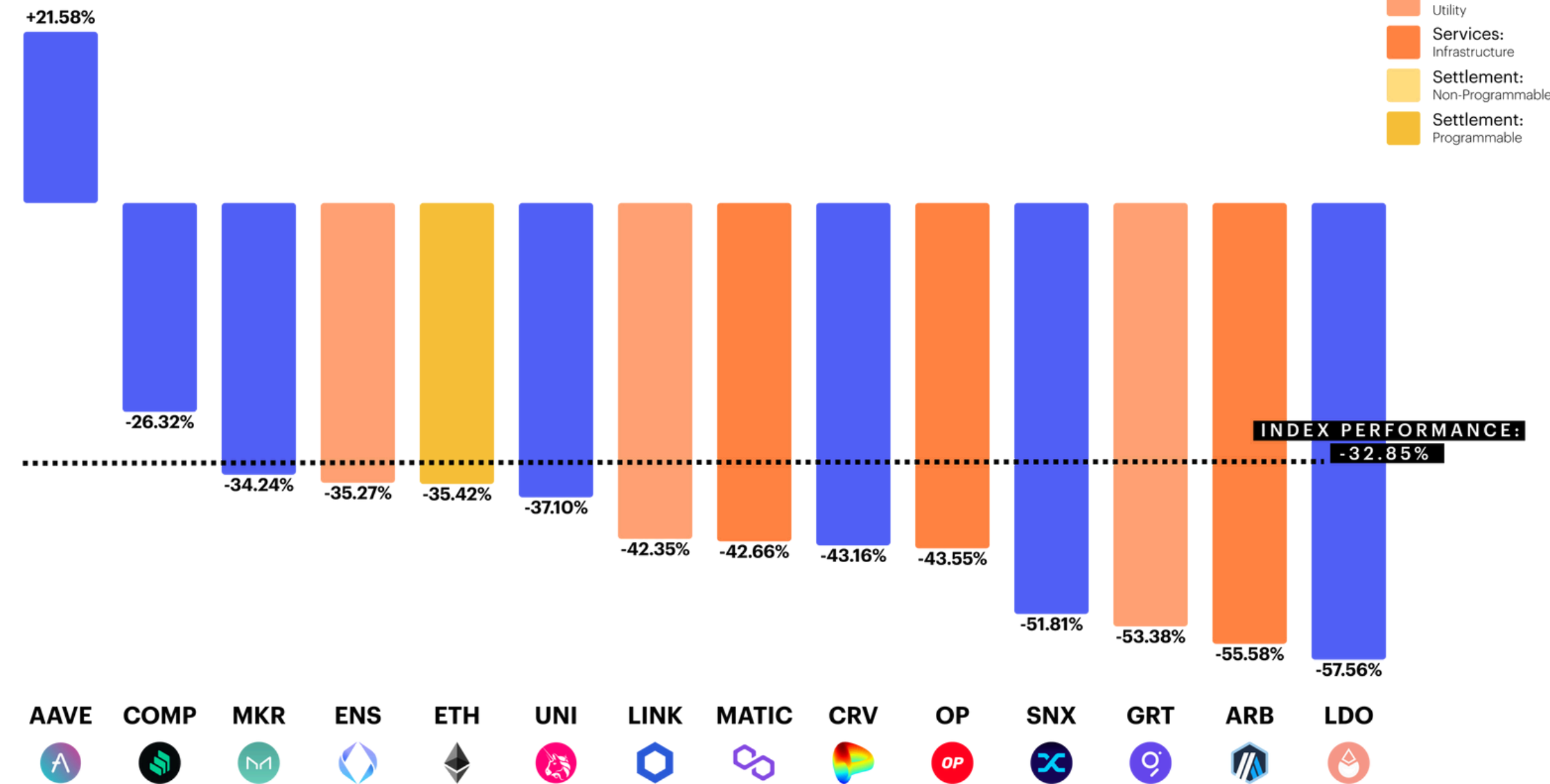
During the past quarter, our CF DeFi Composite Index continued its decline, with only one of the fourteen constituents, AAVE, posting positive performance. The remaining thirteen tokens fell by an average of 42%.

Aave's AAVE token was the leader for the quarter, advancing by 21.58% as Aave considered a proposal for a fee switch and an AAVE token buyback. This discussion led to an increased interest in the protocol's governance and helped contribute to the token's performance. In July, a governance vote approved the launch of Aave on Aptos, the first non-EVM chain supported by the protocol.

Compound, the other token in the borrowing and lending segment, was the only other token to outperform the index. In July, the protocol issued a proposal to take 30% of the protocol reserves and allocate them to staked COMP token holders.

Source: CF Benchmarks, as of September 3 2024

AAVE Sees Record Borrowing Activity

Source: CF Benchmarks, Dune Analytics as of September 3, 2024
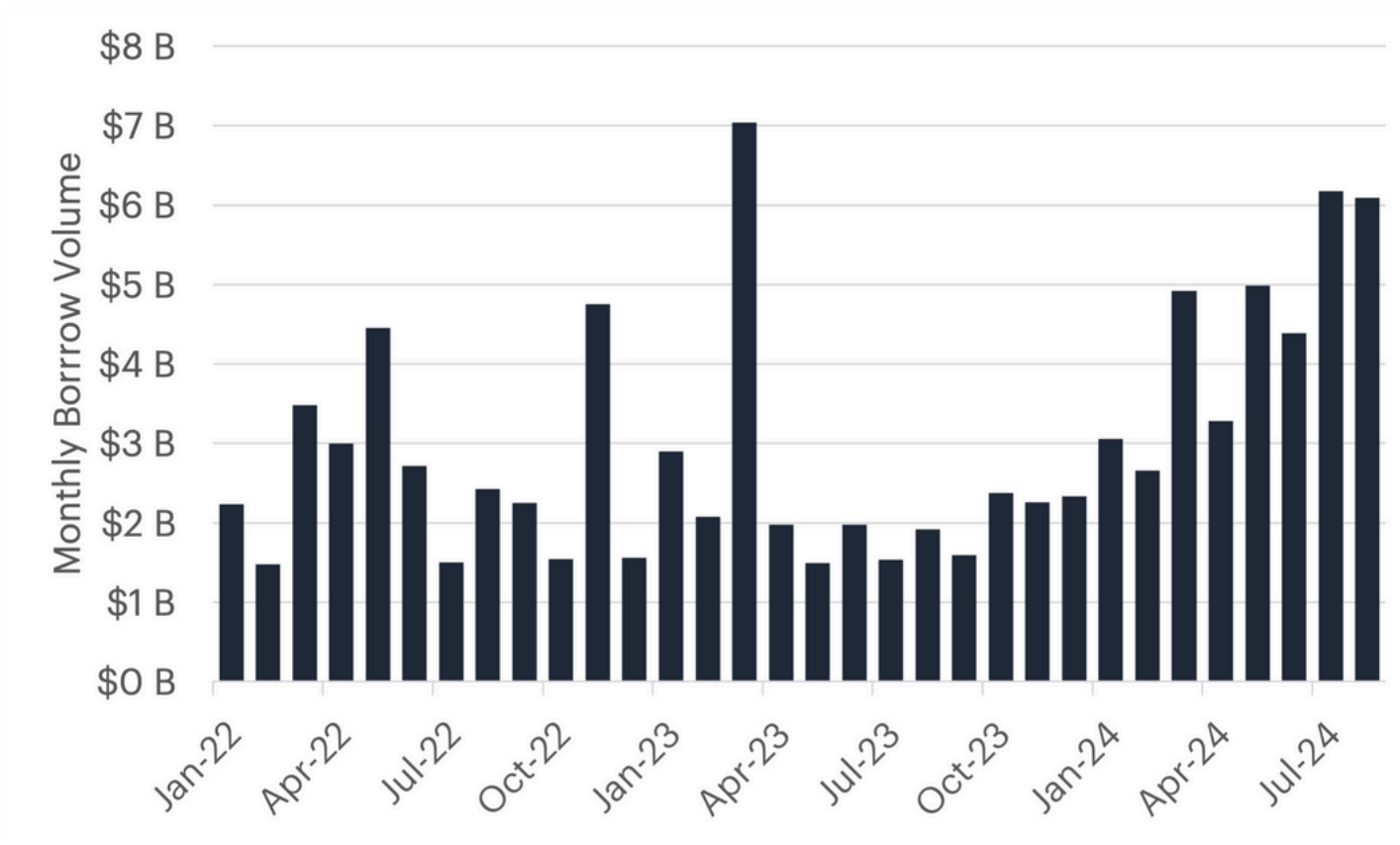
Aave is a decentralized finance (DeFi) protocol on Ethereum that enables users to lend and borrow cryptocurrencies. Lenders deposit assets to earn interest, while borrowers provide collateral to take out loans. Aave offers both stable and variable interest rates and features "flash loans," allowing uncollateralized borrowing if repaid within one transaction. All operations are managed through smart contracts, ensuring transparency and security.

In July and August of 2024, the Aave protocol saw borrowing volumes exceed $6 billion, the second-highest on record, trailing only the surge seen during the banking crisis of March 2023. This increase in borrowing coincided with a record number of active users, as Aave surpassed its 2022 peak of 40,000 borrowers in late August. This growing borrowing volume contributes to demand for the AAVE token, which is used for governance, staking, and sometimes for borrowing.
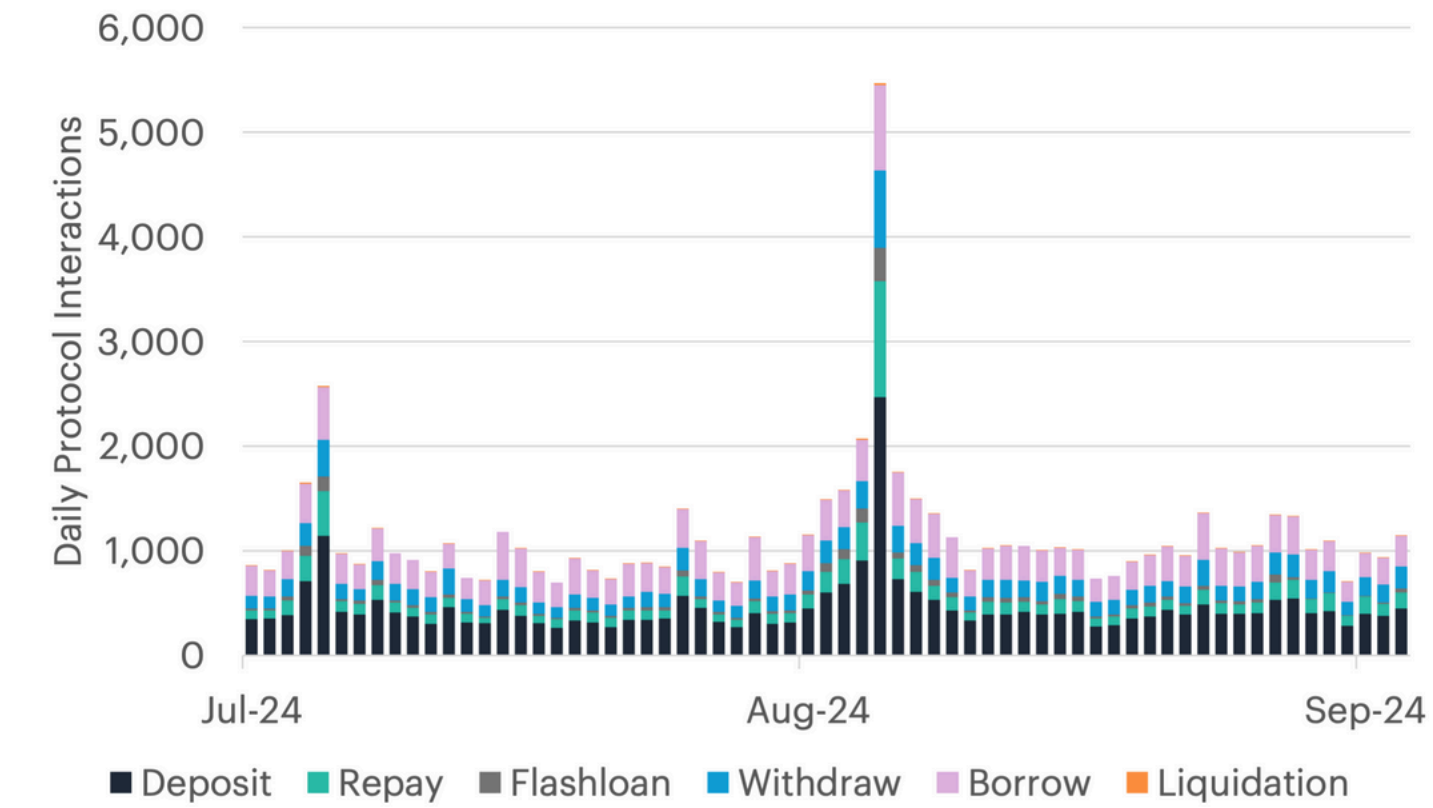
In addition to the heightened borrowing activity, user behavior during the two market sell-offs in the quarter highlights both Aave's utility and the market's risk appetite. Notably, on August 5th, platform activity surged to its highest level since March 2023. During this period of market volatility, 45% of all activity involved users adding additional collateral. In many cases, this was likely to prevent liquidations as crypto asset prices fell. In other cases, this additional collateral may have been used to facilitate increased borrowing by traders looking to take long positions during the downturn.

Attribution Analysis: CF Web 3.0 Smart Contract Platforms Index

Smart Contract Platforms Decline in Q3

Index Return Contribution
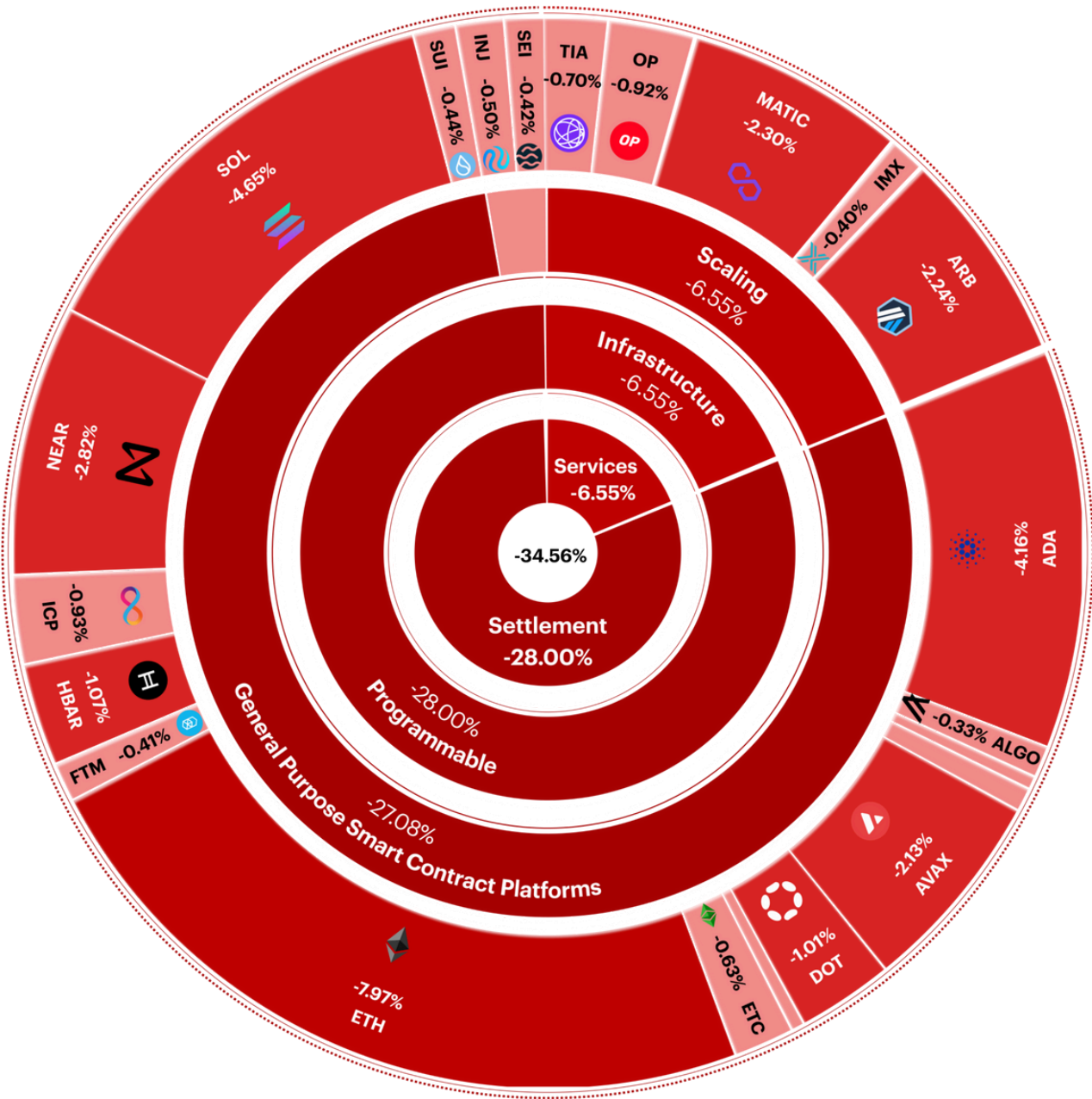
Total Performance Contribution: -34.56% **Date:** 3rd September 2024

CATEGORY		SUB-CATEGORY		SEGMENT			
Services -6.55%		Infrastructure	-6.55%	Scaling	-6.55%	ARB	-2.24%
						IMX	-0.40%
						MATIC	-2.30%
						OP	-0.92%
						TIA	-0.70%
Settlement -28.00%		Programmable	-28.00%	General Purpose Smart Contract Platforms	-27.08%	ADA	-4.16%
						ALGO	-0.33%
						APT	-0.14%
						ATOM	-0.25%
						AVAX	-2.13%
						DOT	-1.01%
						EOS	-0.14%
						ETC	-0.63%
						ETH	-7.97%
						FTM	-0.41%
						HBAR	-1.07%
						ICP	-0.93%
						NEAR	-2.82%
						SOL	-4.65%
				Specialized Purpose Smart Contract Platforms	-0.92%	SUI	-0.44%
						INJ	-0.50%
						SEI	-0.42%

- The CF Web 3.0 Smart Contract Platforms Index declined by -34.56%. Ether was the largest detractor to the total index's performance, accounting for -7.97% of the performance contribution.

- The underperformance of general purpose smart contract platforms such as ETH, SOL, and ADA reduced the headline index's value by -27.08%. Additionally, a -35.42% decline in Ether combined with its large weight resulted in a -7.97% decline in the index.

Source: CF Benchmarks, as of September 3 2024

Index Weights

3rd June 2024

Total Weight: 100%   **Index Value:** 439.15

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Services 13.53%	Infrastructure 13.53%	Scaling 13.53%	ARB	4.02%
			IMX	0.85%
			MATIC	5.40%
			OP	2.12%
			TIA	1.14%
Settlement 86.47%	Programmable 86.47%	General Purpose Smart Contract Platforms 84.18%	ADA	14.39%
			ALGO	0.96%
			APT	0.43%
			ATOM	0.51%
			AVAX	5.48%
			DOT	2.42%
			EOS	0.33%
			ETC	1.63%
			ETH	22.50%
			FTM	0.82%
			HBAR	2.07%
			ICP	2.34%
			NEAR	5.90%
			SOL	22.50%
			SUI	1.92%
		Specialized Purpose Smart Contract Platforms 2.29%	INJ	1.39%
			SEI	0.90%

3rd September 2024

Total Weight: 100%   **Index Value:** 287.39

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Services 11.87%	Infrastructure 11.87%	Scaling 11.87%	ARB	2.83%
			MATIC	4.92%
			OP	1.84%
			STX	1.68%
			TIA	0.60%
Settlement 88.13%	Programmable 88.13%	General Purpose Smart Contract Platforms 86.14%	ADA	16.27%
			ALGO	1.06%
			APT	0.53%
			ATOM	0.42%
			AVAX	6.11%
			DOT	2.59%
			EOS	0.34%
			ETC	1.55%
			ETH	22.50%
			FTM	0.65%
			HBAR	1.59%
			ICP	2.26%
			NEAR	5.21%
			SOL	22.50%
			SUI	2.56%
		Specialized Purpose Smart Contract Platforms 1.99%	INJ	1.20%
			SEI	0.78%

Market Volatility Weighs on Smart Contract Platforms

Absolute Performance

Index Value: 287.39

INDEX PERFORMANCE: -34.56%

SOL	SUI	ADA	APT	ALGO	ETH	INJ	ETC	AVAX	ICP	DOT	MATIC	EOS	OP	IMX	SEI	NEAR	ATOM	FTM	HBAR	ARB	TIA
-20.66%	-23.18%	-28.89%	-32.28%	-35.05%	-35.42%	-36.15%	-38.77%	-38.96%	-39.71%	-41.61%	-42.66%	-42.68%	-43.55%	-46.56%	-46.67%	-47.74%	-48.90%	-50.24%	-51.83%	-55.58%	-61.23%
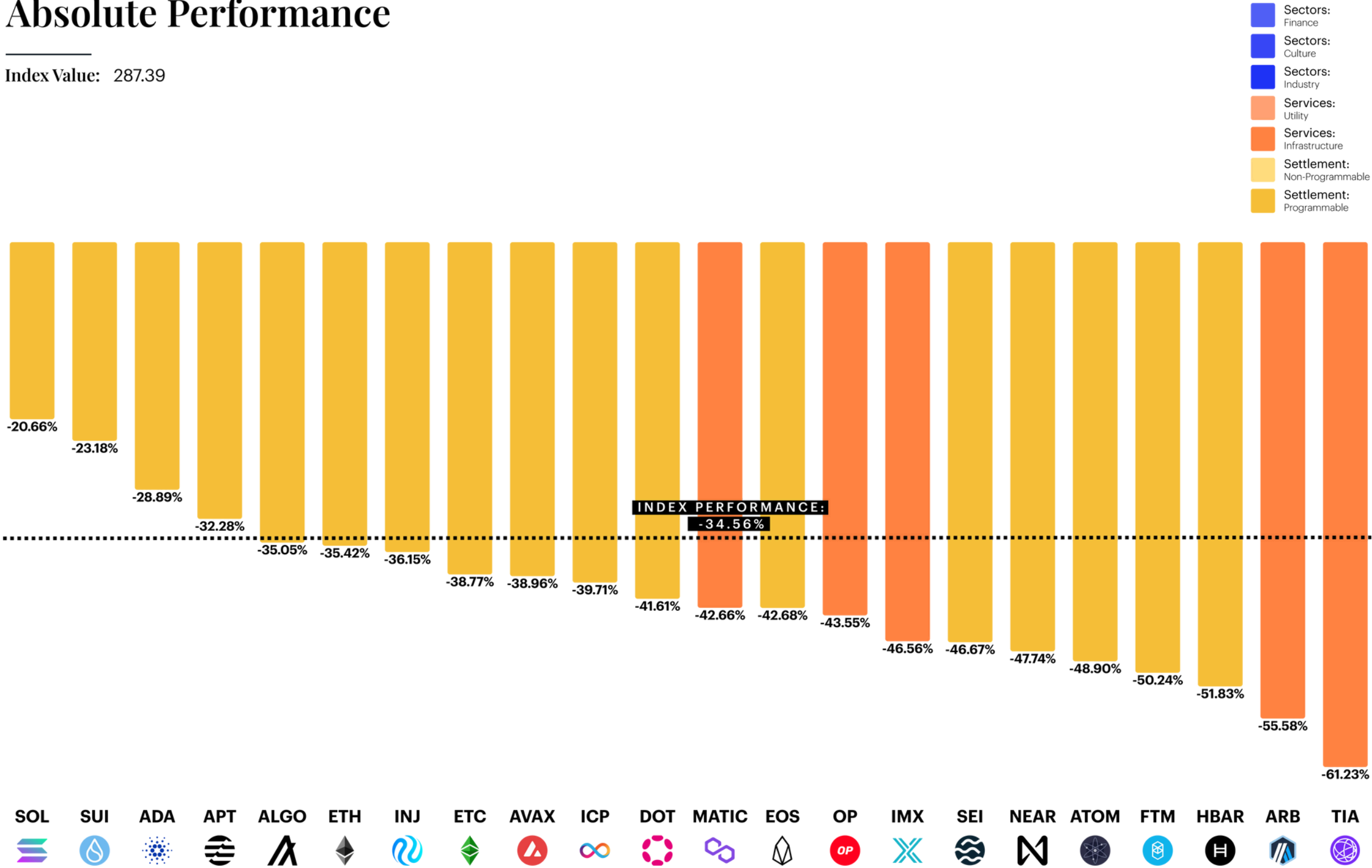
Smart Contract Tokens continued their retreat during the rebalance period, with none posting positive performance. Only 4 out of 23 constituents outperformed the average.

Although Solana declined -20.66% during the rebalance period, it set new records for transaction volume, surpassing 1 billion monthly transactions. User growth has also surged, with over 20 million wallets now active each month. This likely supported demand for the token, helping to stabilize the price.

Sui rallied +38.5% on August 8th following the launch of its first ETP in the US. The Sui network also introduced the Mysticeti upgrade, which significantly boosted performance, leading to an increase in daily active users to over 600,000.

Source: CF Benchmarks, as of September 3 2024

Solana's Scalability Powers User Surge

Solana Transaction Volume

+127% YoY

Monthly Transactions (M)
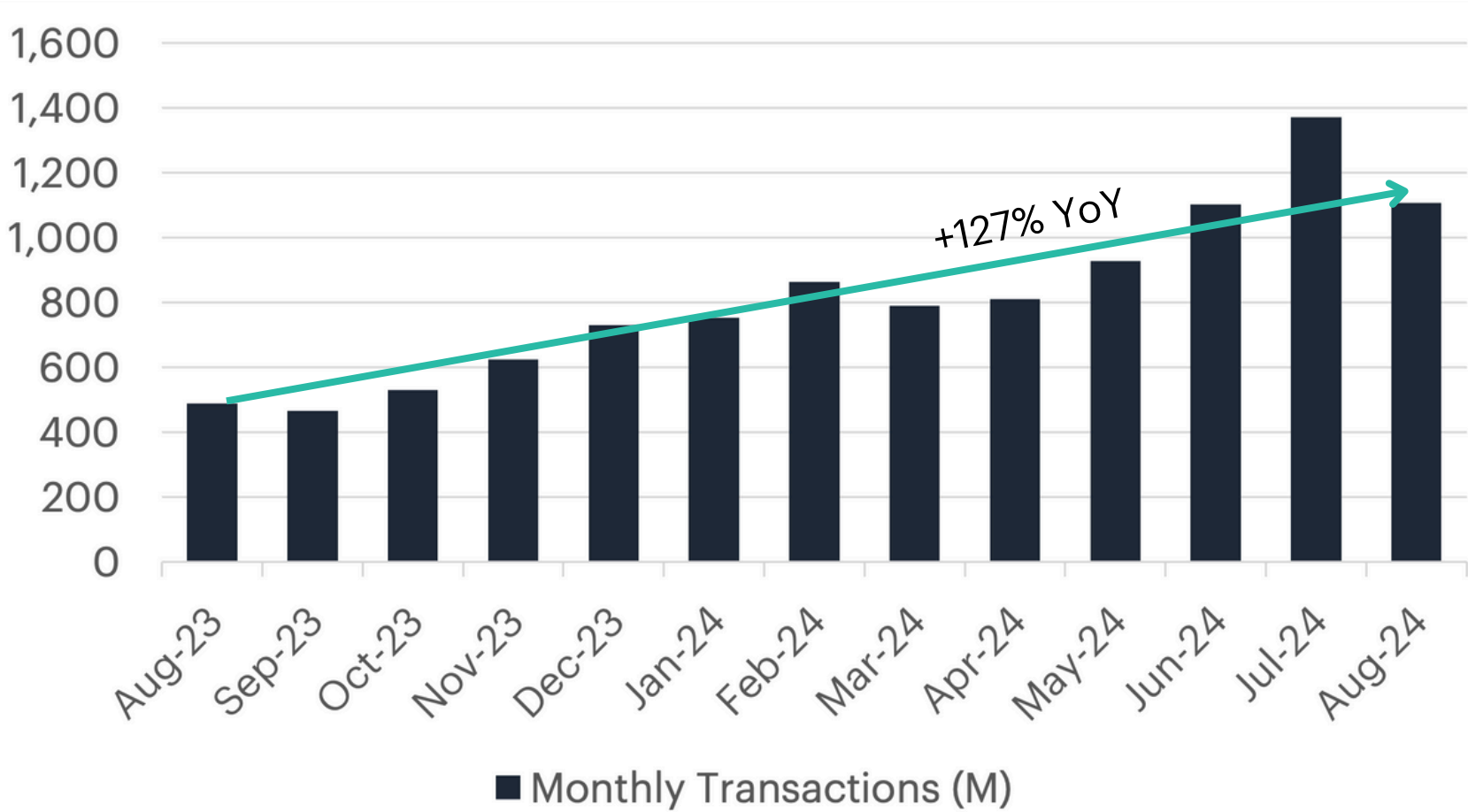
Solana Monthly New Addresses
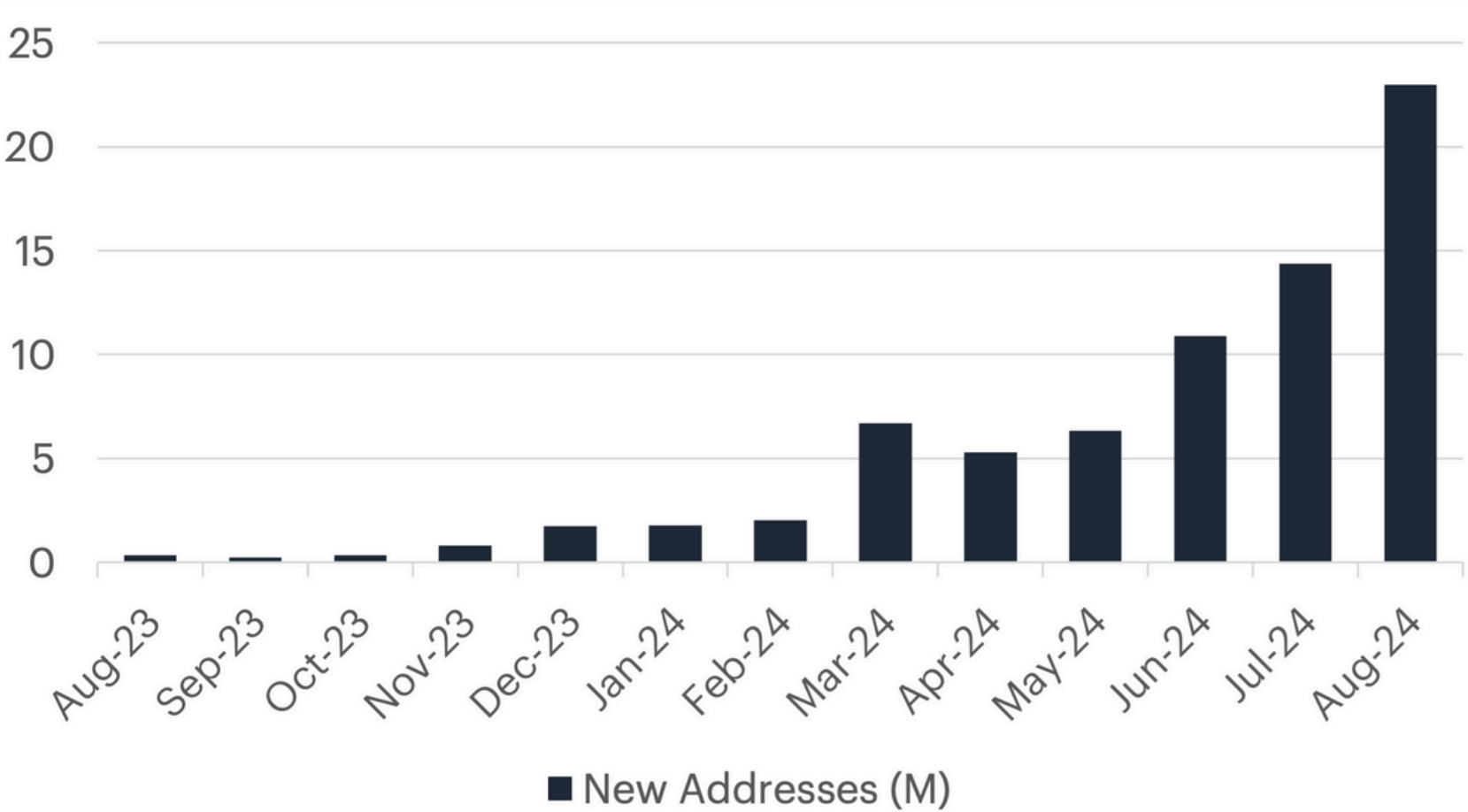
New Addresses (M)

Solana's SOL token experienced the smallest decline over the quarter, as the network continued to see growth in on-chain activity and new users. In August, Solana set a record for new addresses, surpassing 20 million, alongside over 1 billion user transactions. This growth is largely driven by Solana's unique Proof of History (PoH) consensus mechanism, which enables fast, low-cost transactions at scale. These low-cost transactions, combined with user growth, led to decentralized exchange (DEX) trading volumes surpassing $100 billion for the first time in July. Despite a 127% increase in transactions over the last year, average fees have stayed low, at around 2 cents. The resulting demand for SOL, which is required to pay transaction fees and validate the network, has remained strong.

Attribution Analysis:
CF Digital Culture Composite Index

Digital Culture Falls as Gaming Tokens Underperform

Index Return Contribution

Total Performance Contribution: -47.32%   **Date:** 3rd September 2024
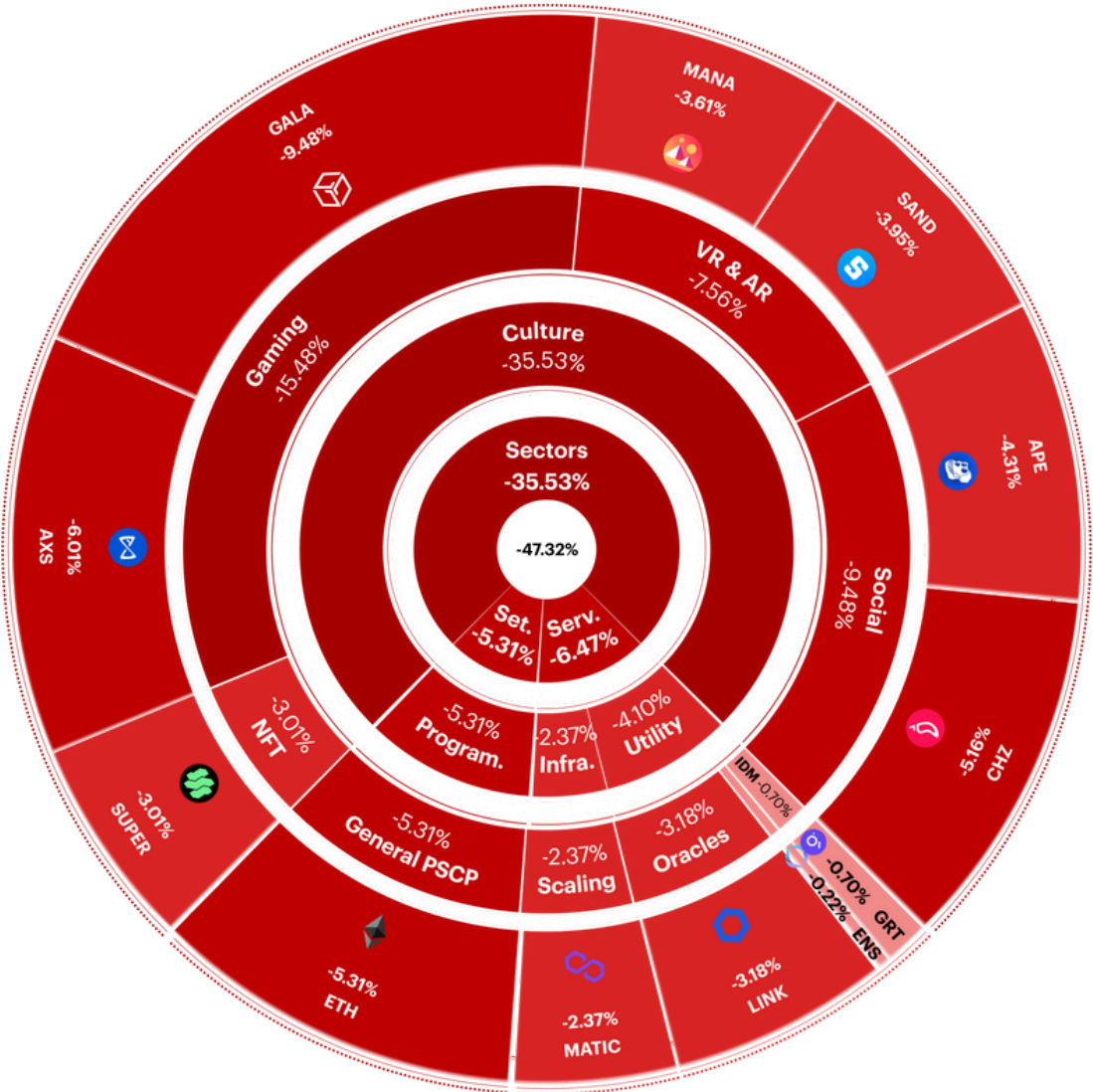
CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors -35.53%	Culture -35.53%	NFT Platforms -3.01%	SUPER -3.01%
		Gaming -15.48%	AXS -6.01%
			GALA -9.48%
		VR & AR -7.56%	MANA -3.61%
			SAND -3.95%
		Social -9.48%	APE -4.31%
			CHZ -5.16%
Services -6.47%	Infrastructure -2.37%	Scaling -2.37%	MATIC -2.37%
	Utility -4.10%	Oracles -3.18%	LINK -3.18%
		Identity -0.22%	ENS -0.22%
		Information & Data Management -0.70%	GRT -0.70%
Settlement -5.31%	Programmable -5.31%	General Purpose Smart Contract Platforms -5.31%	ETH -5.31%

- The CF Digital Culture Composite Index fell by -47.32%. Ethereum Name service's ENS token experienced the smallest decline of -35.27%; when combined with its relatively small weight it accounted for -0.22% of the index's performance.

- The gaming segment was the largest detractor from overall performance, accounting for -15.48% of the index's overall decline. GALA, which declined by -61.5% during the rebalance period, was the largest detractor from the index due to its 11.3% weight.

Source: CF Benchmarks, as of September 3, 2024

Index Weights

3rd June 2024

Total Weight: 100%   **Index Value:** 425.16

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 70.00%	Culture 70.00%	NFT Platforms 8.38%	SUPER 8.38%
		Gaming 28.93%	AXS 13.52%
			GALA 15.41%
		VR & AR 16.70%	MANA 8.22%
			SAND 8.48%
		Social 15.99%	APE 7.96%
			CHZ 8.03%
Services 15.00%	Infrastructure 5.56%	Scaling 5.56%	MATIC 5.56%
	Utility 9.44%	Oracles 7.50%	LINK 7.50%
		Identity 0.64%	ENS 0.64%
		Information & Data Management 1.30%	GRT 1.30%
Settlement 15.00%	Programmable 15.00%	General Purpose Smart Contract Platforms 15.00%	ETH 15.00%

3rd September 2024

Total Weight: 100%   **Index Value:** 223.99

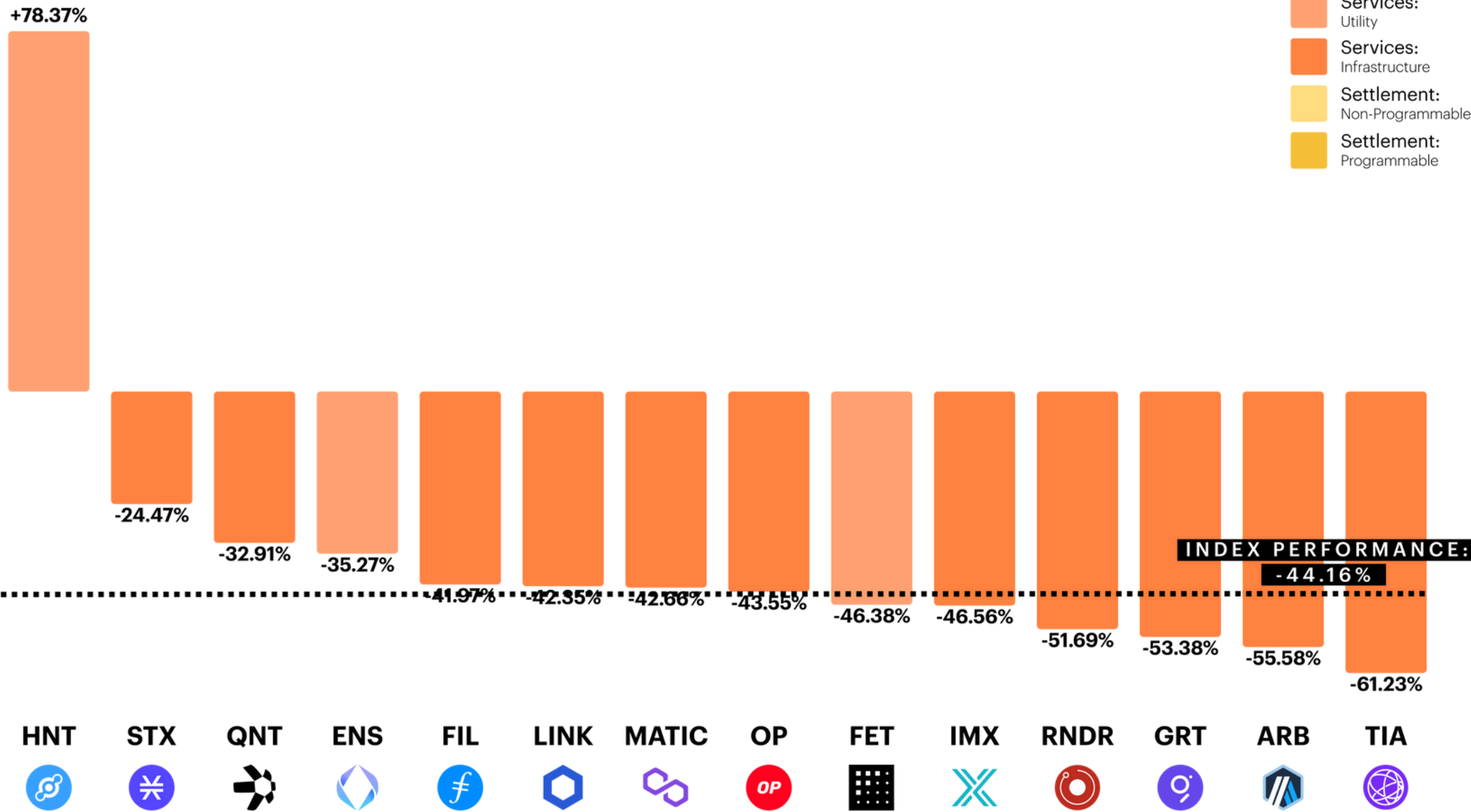| CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 70.00%	Culture 70.00%	Gaming 43.84%	GALA 14.66%
			IMX 16.66%
			SUPER 12.52%
		VR & AR 20.23%	MANA 10.23%
			SAND 10.00%
		Social 5.93%	CHZ 5.93%
Services 15.00%	Infrastructure 5.44%	Scaling 5.44%	MATIC 5.44%
	Utility 9.56%	Oracles 7.82%	LINK 7.82%
		Identity 0.70%	ENS 0.70%
		Information & Data Management 1.04%	GRT 1.04%
Settlement 15.00%	Programmable 15.00%	General Purpose Smart Contract Platforms 15.00%	ETH 15.00%

NB: SUPER has been reclassified from NFT Platforms to Gaming, as part of the CF Digital Asset Classification Structure annual reclassification exercise.

GALA Underperforms Following Exchange Hack

Absolute Performance

Index Value: 223.99

Sectors: Finance
Sectors: Culture
Sectors: Industry
Services: Utility
Services: Infrastructure
Settlement: Non-Programmable
Settlement: Programmable

Token	Performance
ENS	-35.27%
ETH	-35.42%
SUPER	-35.96%
LINK	-42.35%
MATIC	-42.66%
MANA	-43.97%
AXS	-44.41%
SAND	-46.54%
GRT	-53.38%
APE	-54.18%
GALA	-61.50%
CHZ	-64.33%

INDEX PERFORMANCE: -47.32%
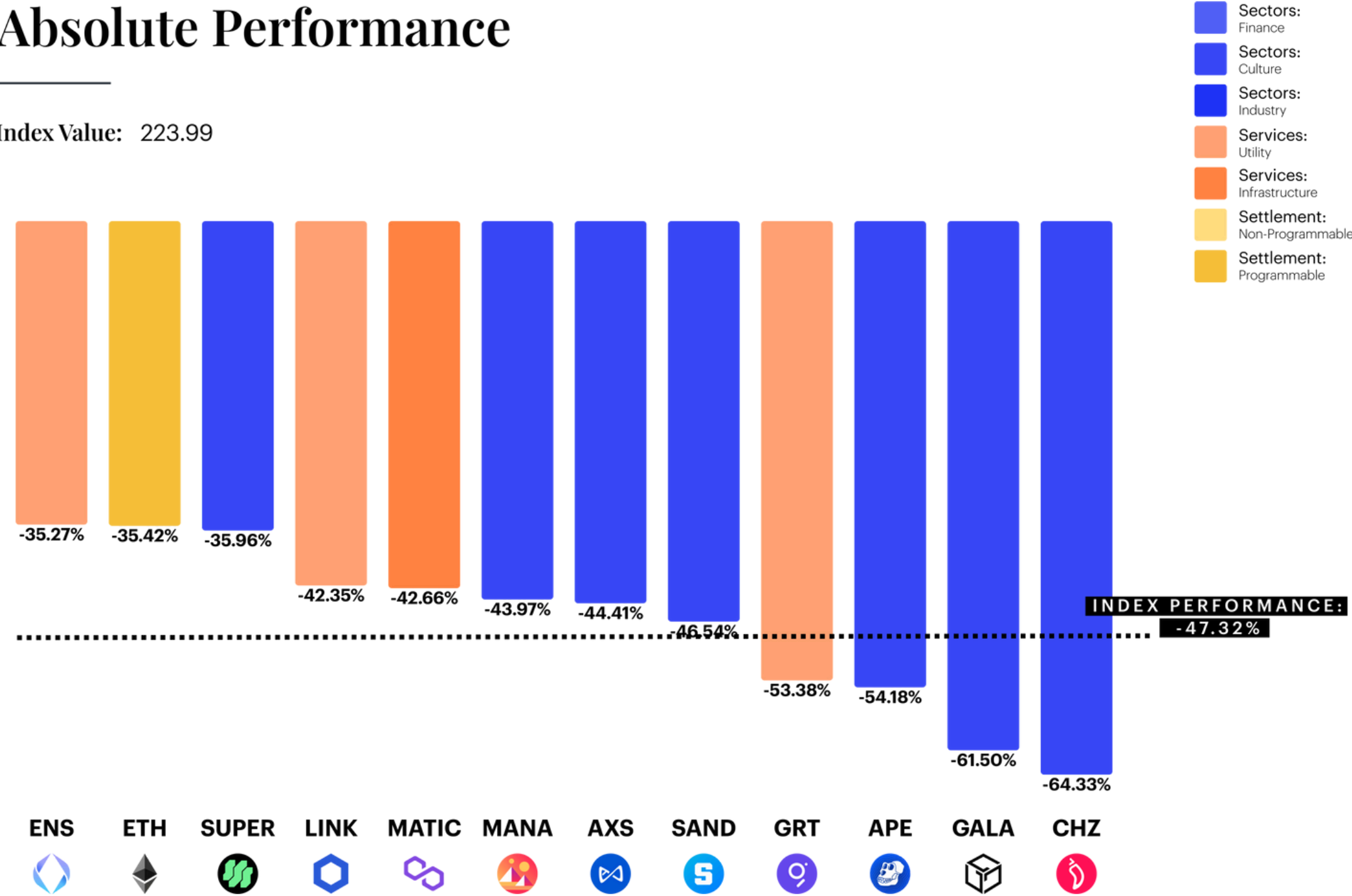
Digital Culture tokens have continued their decline over the past three months, with none of the constituents posting positive performance. The -35.42% decline in Ether's price during the period set the stage for a precipitous drop in the smaller cap tokens.

In the gaming segment, GALA declined by over 60% during the quarter. This decline followed a security breach in mid-July at WazirX, one of India's largest crypto exchanges. Significant amounts of GALA tokens were stolen in the breach, and the attackers offloaded the tokens through Uniswap. The sell pressure from this event suppressed the price ahead of further selling in the small-cap altcoin market.

Chiliz, the native token of the blockchain-based sports and entertainment platform Socios, was the worst performer during the quarter, declining by -64.3%. This decline occurred despite the announcement of a partnership with South Korean tech giant Naver in late August, highlighting the relative weakness that a small-cap token can experience in a risk-off period.

Source: CF Benchmarks, as of September 3 2024

ENS's Revenue Resilience Defies Market Trends

ENS Monthly Revenue
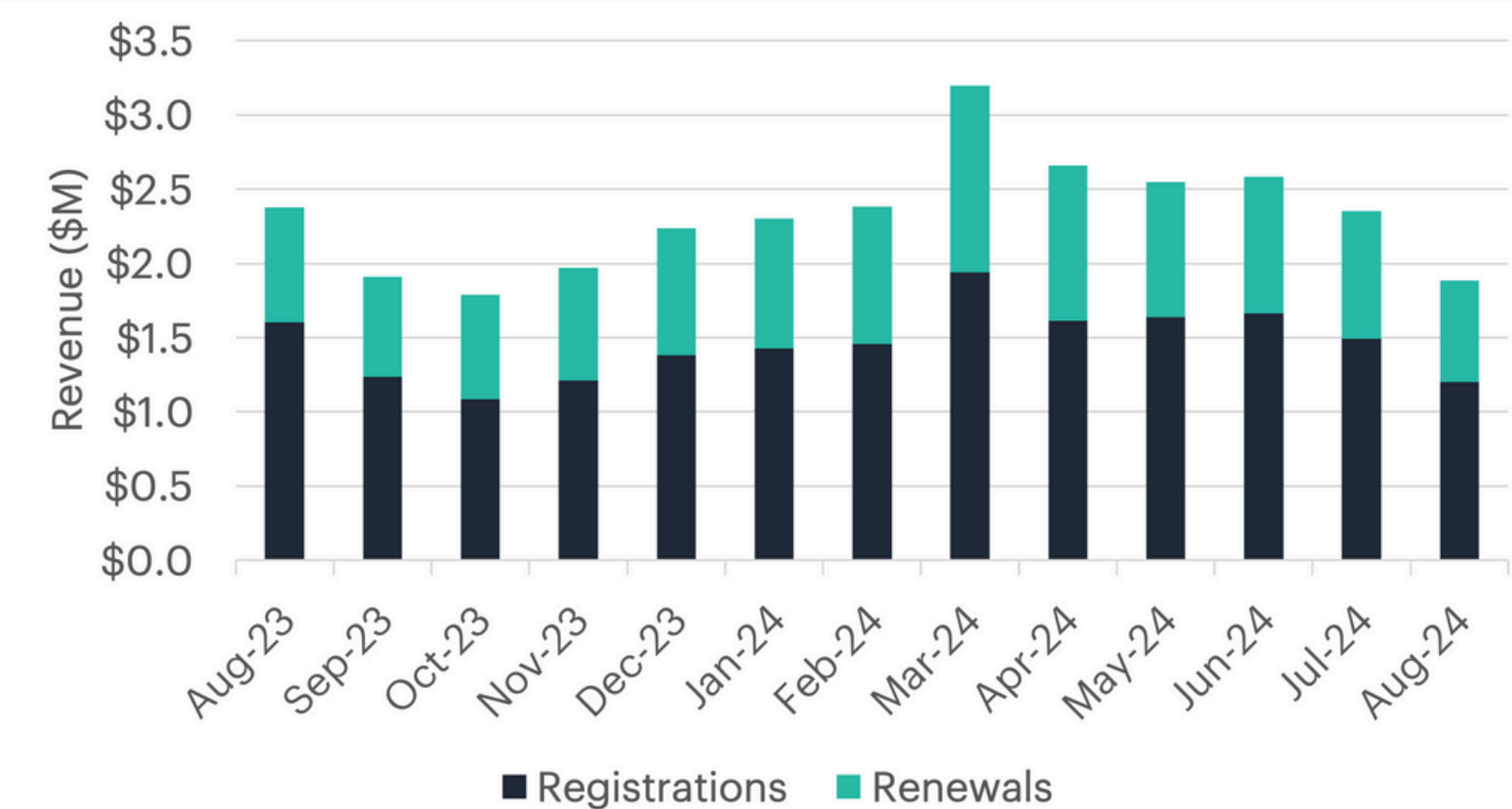
ENS Monthly Subscribers
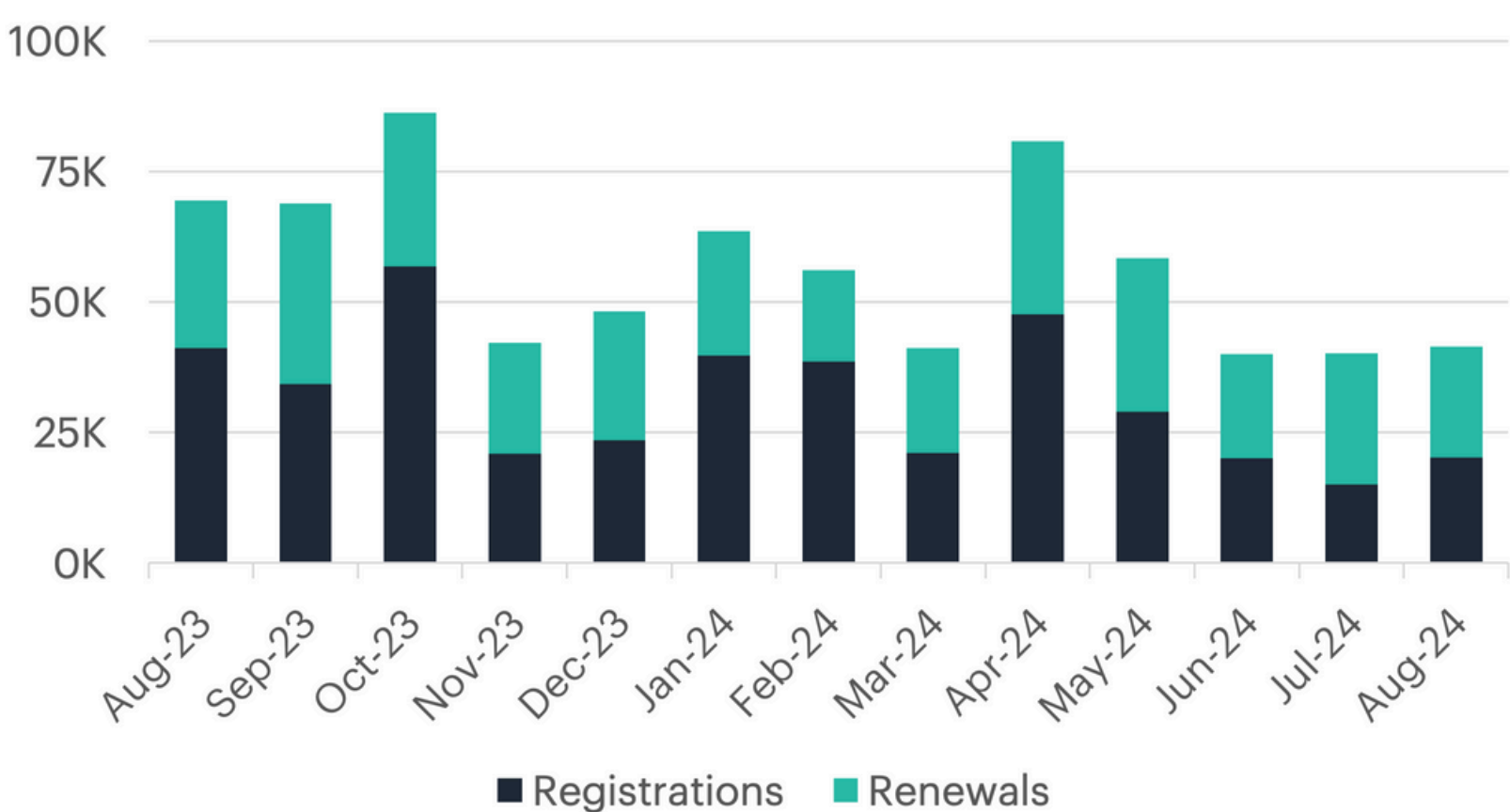
Protocol revenue for a Web3 platform typically stems from fees or payments made by users for accessing and utilizing its services. For the ENS (Ethereum Name Service) protocol, revenue is derived from fees paid by users to register, renew, and manage domain names on the blockchain. This revenue supports ongoing development and maintenance. Over the past 12 months, ENS has been profitable, generating a total net cash flow of $14.5 million.

Despite a nearly -33% decline in monthly subscribers over the last quarter, revenue fell by only -19%, indicating that ENS's active users are spending more on average. This sustained spending has contributed to the protocol's continued profitability. In a quarter where the broader digital culture index declined by -47.32%, ENS's relatively smaller -35.2% decline suggests that its improved profitability may contribute to long-term value creation, with the market beginning to price in that potential.

Source: CF Benchmarks, Dune Analytics, as of August 31, 2024
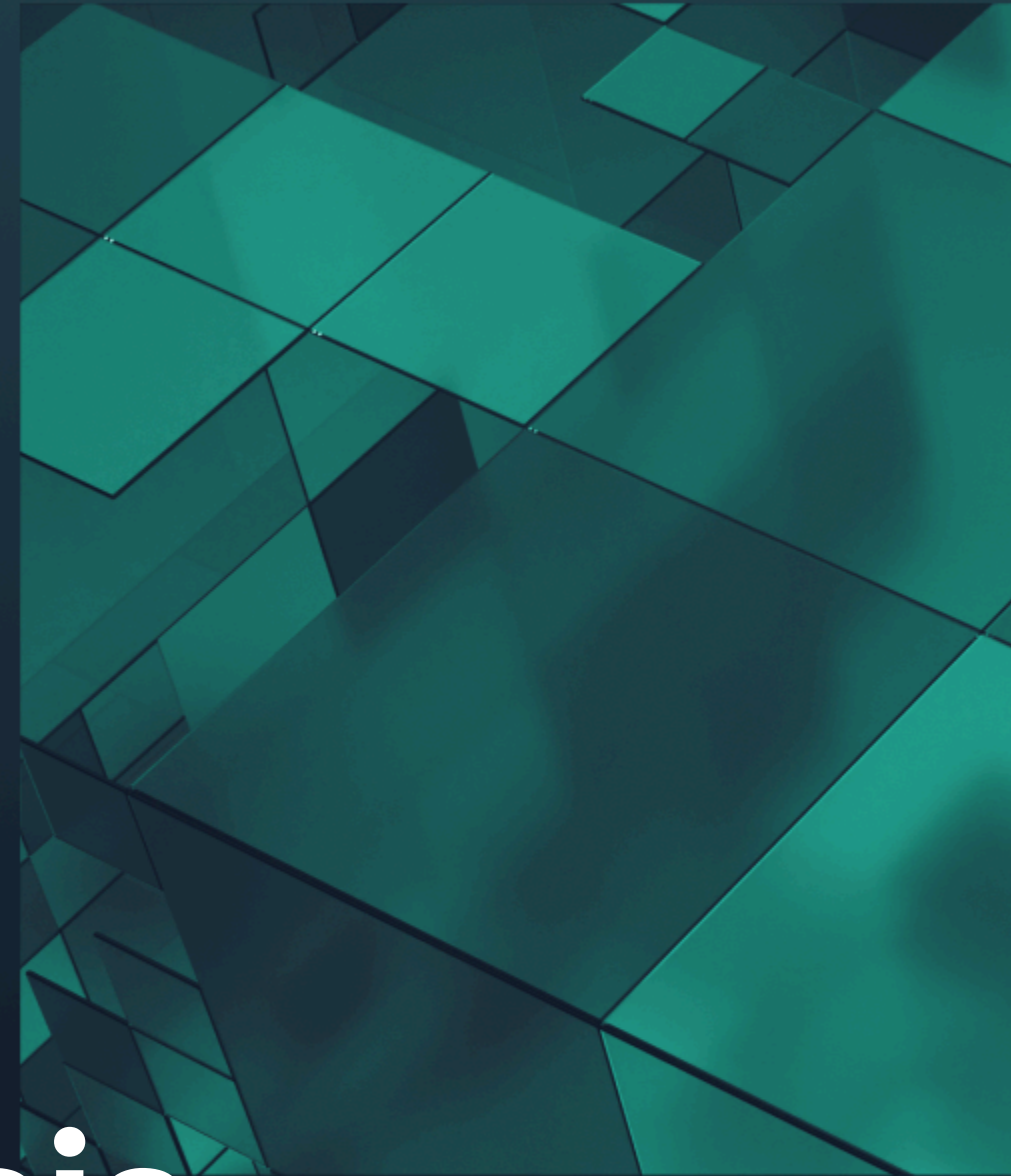
Attribution Analysis:
CF Blockchain Infrastructure Index

Scaling Segment Weighs on Infrastructure Index

Index Return Contribution

Total Performance Contribution: -44.16% Date: 3rd September 2024

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET	
Services	Infrastructure -30.84%	Scaling -18.89%	ARB	-6.44%
			IMX	-1.14%
			MATIC	-6.64%
			OP	-2.65%
			TIA	-2.01%
		Interoperability -0.83%	QNT	-0.83%
		Computing -11.12%	FET	-6.34%
			HNT	+0.69%
			RNDR	-4.30%
			STX	-1.17%
	Utility -13.32%	Oracles -8.89%	LINK	-8.89%
		Identity -0.63%	ENS	-0.63%
		Information & Data Management -3.80%	FIL	-1.85%
			GRT	-1.95%
-44.16%				

- The CF Blockchain Infrastructure Index experienced a relatively steep decline of -44.16% over the last rebalancing period, lagging the broader crypto market (as gauged by the CF Free-Float Broad Cap Index) by approximately -21%.

- Helium's HNT token emerged as the top individual contributor, adding +0.69% to the index's performance. From a CF DACS segment perspective, scaling solutions were the worst performers, detracting -18.89% from the overall index.

Source: CF Benchmarks, as of September 3 2024

Index Weights

3rd June 2024

Total Weight: 100%   **Index Value:** 621.65

CATEGORY	SUB-CATEGORY		SEGMENT		ASSET	
Services	Infrastructure	69.16%	Scaling	38.98%	ARB	11.59%
					IMX	2.45%
					MATIC	15.56%
					OP	6.10%
					TIA	3.28%
			Interoperability	2.53%	QNT	2.53%
			Computing	27.65%	FET	13.67%
					HNT	0.88%
					RNDR	8.31%
					STX	4.78%
	Utility	30.84%	Oracles	21.00%	LINK	21.00%
			Identity	1.78%	ENS	1.78%
			Information & Data Management	8.05%	FIL	4.40%
					GRT	3.65%
100%						

3rd September 2024

Total Weight: 100%   **Index Value:** 347.16

CATEGORY	SUB-CATEGORY		SEGMENT		ASSET	
Services	Infrastructure	66.97%	Scaling	41.04%	ARB	9.78%
					MATIC	16.99%
					OP	6.35%
					STX	5.86%
					TIA	2.06%
			Interoperability	3.05%	QNT	3.05%
			Computing	22.88%	FET	11.88%
					JASMY	2.69%
					RNDR	8.31%
	Utility	33.03%	Oracles	22.50%	LINK	22.50%
			Identity	2.19%	ENS	2.19%
			Information & Data Management	8.34%	FIL	5.08%
					GRT	3.26%
100%						

NB: STX has been reclassified from Computing to Scaling, as part of the CF Digital Asset Classification Structure annual reclassification exercise.

HNT Token Shines on User Growth

Absolute Performance

Index Value: 347.16

Sectors: Finance
Sectors: Culture
Sectors: Industry
Services: Utility
Services: Infrastructure
Settlement: Non-Programmable
Settlement: Programmable

Token	Performance
HNT	+78.37%
STX	-24.47%
QNT	-32.91%
ENS	-35.27%
FIL	-41.97%
LINK	-42.35%
MATIC	-42.66%
OP	-43.55%
FET	-46.38%
IMX	-46.56%
RNDR	-51.69%
GRT	-53.38%
ARB	-55.58%
TIA	-61.23%

INDEX PERFORMANCE: -44.16%

Blockchain infrastructure protocols witnessed a broad decline over the latest rebalance period, with 71% of the constituents declining more than -40%.

The Helium Network's HNT token was the only positive performer over the past quarter. Its price moved higher as the launch of the energy subnetwork marks the beginning of the protocol's efforts to onboard additional physical infrastructure onto the network. There was also continued demand for the network's data credits as the network saw the total number of Helium mobile subscribers surpassed 100,000 in July.

Bitcoin layer 2 protocol, Stacks, suffered the smallest decline among infrastructure tokens. The Stacks network successfully completed its highly anticipated Nakamoto upgrade on August 28th, which will bring shorter transaction confirmation times and increase network throughput. Market anticipation for the upgrade contributed to strong performance in July before the August sell-off.

Source: CF Benchmarks, as of September 3 2024

Helium's Data Demand Drives Token Surge

Monthly Active Users — Average Revenue Per User (RHS)

HNT announces expansion into broader DePINs

+131%

—HNT/USD

Source: CF Benchmarks, Dune Analytics, as of September 3, 2024
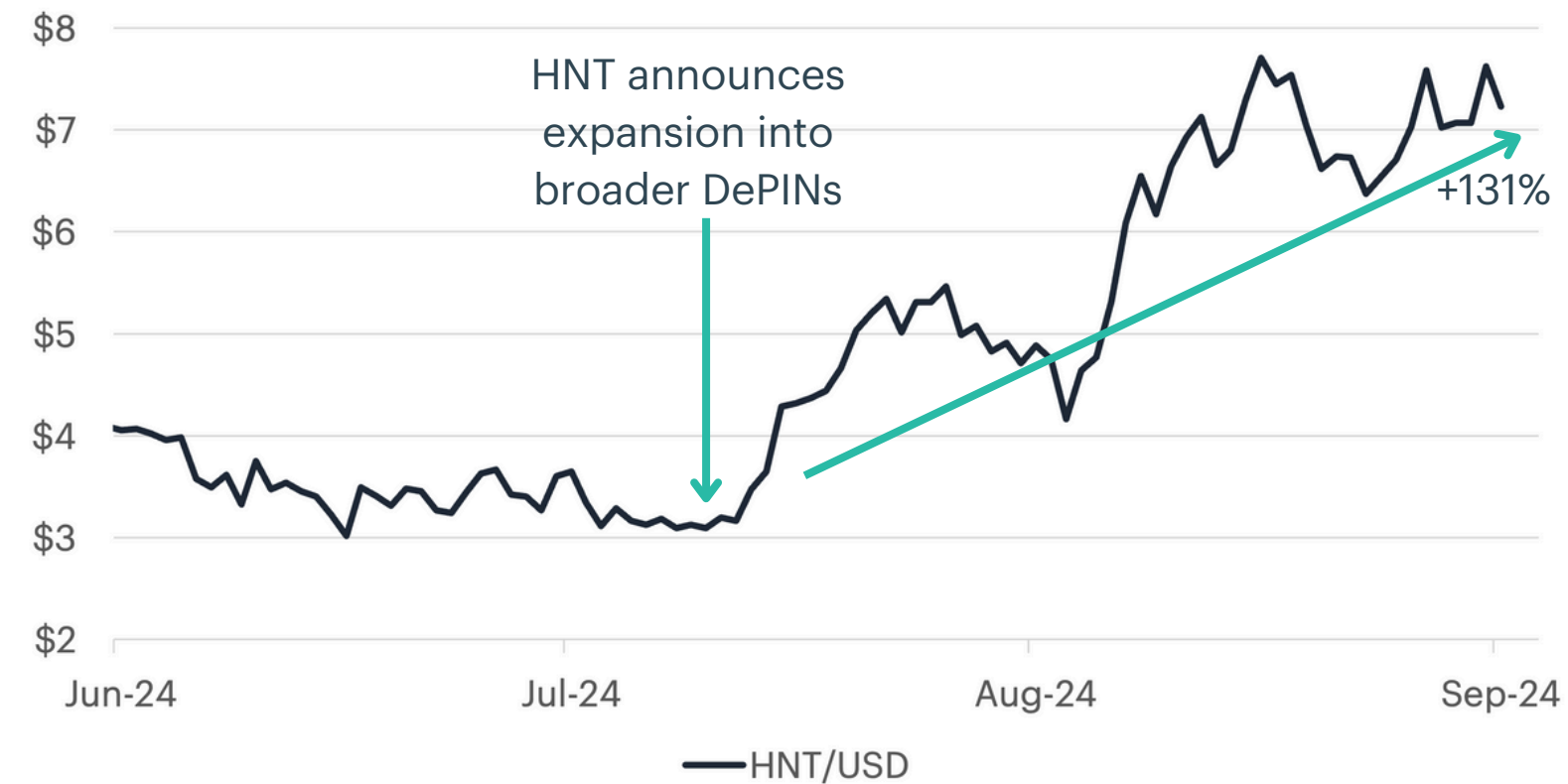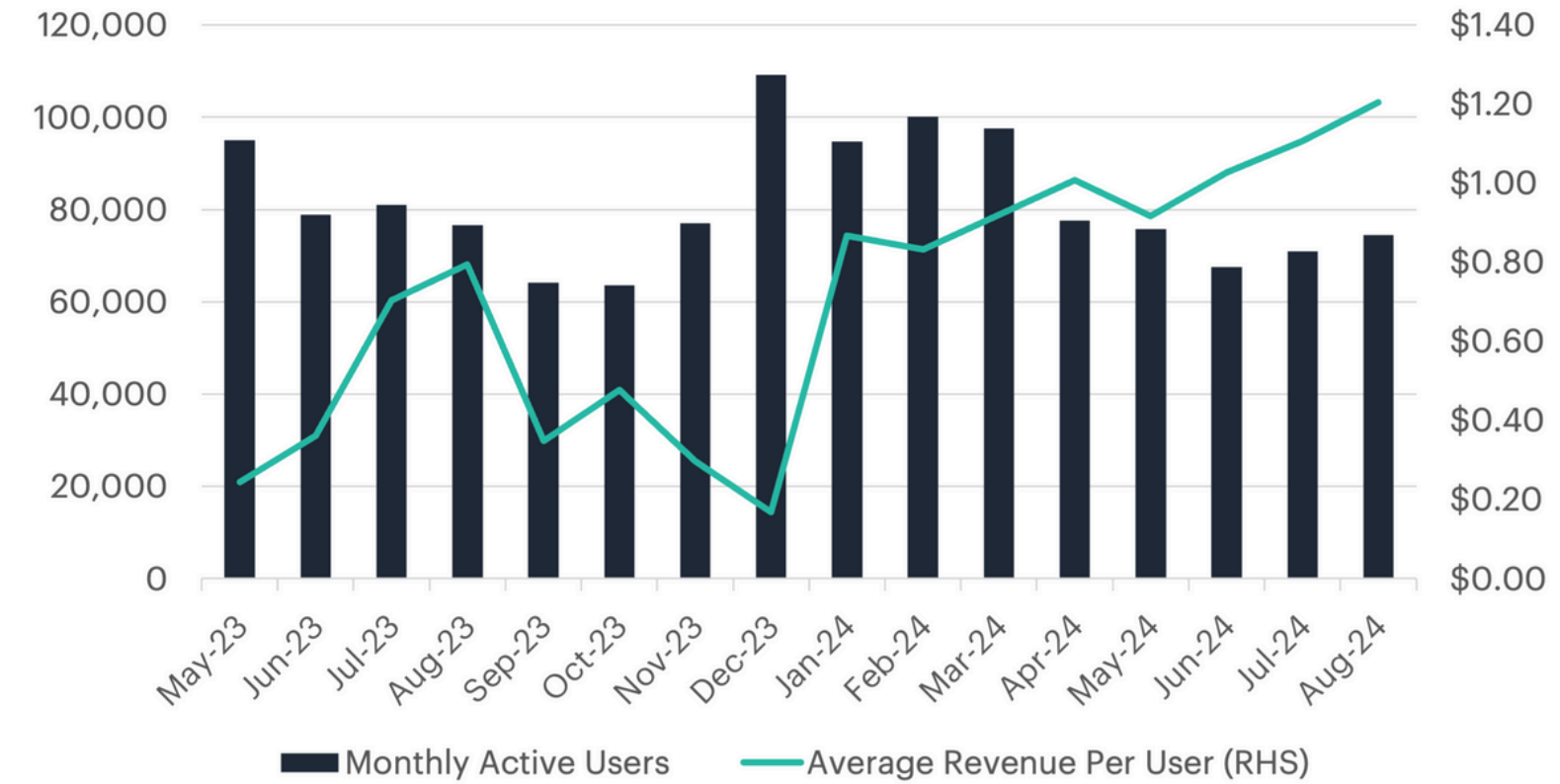
A DePIN (Decentralized Physical Infrastructure Network) is a blockchain-based system where participants provide and maintain physical infrastructure in exchange for network rewards. The Helium network, a decentralized wireless network designed for IoT devices, enables low-cost, long-range data transmission.

Data Credits (DCs) are used to pay for sending data across the Helium network and are generated by burning Helium's native token, HNT. This burning reduces the circulating supply of HNT, creating deflationary pressure that can drive up its value as demand for Data Credits grows. Since DCs are non-transferable, have a fixed value, and are tied to real-world data usage, they provide users with a stable cost structure while maintaining steady demand for the HNT token.

In 2024, Helium saw a +359% increase in total sign-ups. Although the number of monthly active addresses declined by -32%, growing demand for Data Credits led to a +619% increase in average revenue per user (YTD). This suggests that each active user is consuming more data on the network compared to the start of the year.

In July, the Helium Foundation announced plans to expand its wireless network to include broader DePINs, adding support for compute, storage, energy, and mobility applications. Following this announcement, the HNT token rallied +131%, as investors recognized the potential value creation from expanding one of the largest decentralized networks of IoT devices.

Appendix

Market Performance Overview

Major Crypto-Pairs (USD)

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatiltity
Aave	3.2%	0.4%	12.5%	16.3%	11.2%	90.50
Solana	-0.7%	-15.4%	-19.2%	-1.1%	21.2%	77.72
Bitcoin	-0.9%	-6.6%	-10.1%	-6.2%	35.6%	51.29
Maker	-1.7%	-19.7%	-33.7%	-18.4%	9.3%	90.47
Dogecoin	0.7%	-6.1%	-16.1%	-21.6%	6.1%	79.24
Litecoin	1.3%	3.6%	-4.0%	-22.0%	-15.0%	59.96
Stellar Lumens	1.3%	-3.7%	-4.1%	-25.4%	-28.9%	54.66
Ethereum	-2.2%	-5.4%	-21.2%	-27.9%	4.3%	72.46
Algorand	-1.5%	-9.6%	-7.8%	-44.6%	-48.6%	75.22
Chainlink	-2.9%	-10.6%	-15.9%	-47.4%	-34.5%	86.65
Avalanche	-1.1%	-14.7%	-11.5%	-47.8%	-46.1%	87.50
Uniswap	1.3%	0.6%	-12.6%	-48.0%	-20.2%	97.79
Polkadot	0.0%	-8.4%	-19.9%	-50.4%	-51.1%	64.23
Compound	-1.5%	-9.1%	-15.1%	-52.2%	-30.3%	82.18
Cardano	-2.5%	-11.7%	-14.8%	-52.9%	-46.5%	64.86
Axie	-0.9%	-7.9%	-16.7%	-52.9%	-51.0%	81.66
Polygon	1.3%	-18.7%	-15.3%	-59.9%	-59.4%	76.70
Cosmos	-1.2%	-13.4%	-21.0%	-61.9%	-61.8%	65.02
Curve	-2.3%	-7.8%	-5.8%	-71.3%	-66.0%	71.85

Equities

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatiltity
MSCI Japan Index	0.5%	2.1%	7.9%	17.7%	17.7%	35.69
S&P 500 INDEX	-2.1%	-1.7%	3.6%	17.0%	17.0%	14.15
MSCI World Index	-1.7%	-1.4%	4.4%	15.0%	15.0%	12.57
MSCI ACWI Index	-1.6%	-1.3%	4.3%	14.4%	14.4%	12.15
Nasdaq-100 Index	-3.1%	-3.2%	2.9%	13.3%	13.3%	20.64
MSCI Europe Index	-1.0%	0.2%	4.6%	11.6%	11.6%	11.58
FTSE 100 Index	-0.8%	-0.5%	2.2%	10.5%	10.5%	9.74
MSCI Emerging Markets Index	-0.6%	-0.9%	3.0%	8.8%	8.8%	14.76

Commodities

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatiltity
Bloomberg Gold Subindex	-0.1%	-1.1%	2.6%	20.3%	20.3%	16.72
Bloomberg Precious Metals Subindex	-0.8%	-2.6%	1.3%	15.3%	15.3%	20.96
Bloomberg WTI Crude Oil Subindex	-4.2%	-6.5%	-2.6%	3.0%	3.0%	27.07
Bloomberg Industrial Metals Subindex	-2.1%	-4.7%	2.4%	-0.7%	-0.7%	20.48
Bloomberg Commodity Index	-0.9%	-2.0%	0.5%	-3.5%	-3.5%	12.75
Bloomberg Energy Subindex	-2.4%	-3.9%	-2.4%	-10.1%	-10.1%	22.60

Fixed Income

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatiltity
Bloomberg Global High Yield Index	-0.2%	-0.2%	2.1%	7.3%	7.3%	3.09
Bloomberg Global Inflation-Linked Index	0.2%	-0.2%	0.4%	3.5%	3.5%	4.21
Bloomberg US Short Term Treasury Index	0.0%	0.1%	0.4%	3.5%	3.5%	0.47
Bloomberg Global Agg Credit Index	0.2%	-0.4%	0.9%	3.5%	3.5%	5.22
Bloomberg Global-Aggregate Bond Index	0.3%	-0.4%	0.9%	1.9%	1.9%	5.73
Bloomberg US Long Treasury Bond Index	1.4%	0.1%	-0.2%	1.8%	1.8%	13.27

Fiat Currency Pairs

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatiltity
JAPANESE YEN/US DOLLAR	1.0%	-1.0%	0.7%	10.6%	-3.0%	10.74
BRITISH POUND/US DOLLAR	-0.2%	-1.1%	2.4%	3.7%	3.0%	5.54
EURO/US DOLLAR	-0.3%	-1.3%	1.2%	3.1%	0.0%	5.27
TAIWAN DOLLAR/US DOLLAR	-0.1%	-0.4%	2.3%	1.1%	-4.7%	4.11
AUSTRALIAN DOLLAR/US DOLLAR	-1.2%	-1.2%	3.1%	0.6%	-1.5%	7.58
BRAZIL REAL/US DOLLAR	-0.4%	-2.4%	1.5%	-0.9%	-14.0%	12.67
US DOLLAR/SINGAPORE DOLLAR	0.0%	0.5%	-1.5%	-3.6%	-1.0%	3.91
DOLLAR INDEX SPOT	0.2%	1.3%	-1.3%	-3.8%	0.5%	5.37
US DOLLAR/SWISS FRANC	-0.2%	1.0%	-1.0%	-5.4%	1.1%	7.41
MEXICAN PESO/US DOLLAR	0.2%	-0.2%	-3.1%	-7.5%	-14.3%	16.90

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

The CF Diversified Broad Cap Indices

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

The CF Diversified Broad Cap Index and CF Broad Cap Index (Free Float Market Cap Weight) are liquid investible benchmark portfolio indices designed to track the performance of diversified exposure to a broad portfolio of the digital asset class. The index seeks to capture 99% of the total market capitalization of the investible digital asset universe as its constituents.

For the diversified variant, the index constituents are weighted by diversified market capitalization that reduces portfolio weight away from overly dominant constituents. Conversely, the index constituents are weighted using free-float market capitalization and reconstituted and rebalanced once a quarter in accordance with the CF Multi Asset Ground Rules.

The index is calculated and published once a day at 4:00pm London Time every day of the year, it is re-constituted and rebalanced quarterly in accordance with the CF Multi Asset Ground Rules. There are two variants; the CF Diversified Broad Cap Index & CF Floating Broad Cap Index and both were launched on October 30th 2022 with an inception date of September 1st 2022 at a value of 1,000.

Constituent changes: CF Broad Cap Indices

Additions (+)

- Dogwifhat (WIF): Dogwifhat is a dog-themed meme coin on the Solana blockchain.
- Ondo (ONDO): Ondo Finance seeks to bridge the gap between traditional and decentralized finance by improving accessibility to institutional grade financial products through tokenized real works assets.
- JasmyCoin (JASMY): Jasmy develops internet of things (IoT) platforms via edge computing and the use of the InterPlanetary File System (IPFS) for data storage. Jasmy seeks to decentralize the maintenance and sharing of sensitive information.

Subtractions (-)

- Decentraland (MANA): Decentraland is a fully decentralized virtual world. With Decentraland, anyone can buy land inside a virtual world powered by the Ethereum blockchain.
- Synthetix (SNX): Synthetix is a decentralized finance platform on Ethereum that allows users to mint and trade synthetic assets by collateralizing SNX tokens, enabling exposure to various real-world and crypto assets without the need for intermediaries.
- Ape Coin (APE): ApeCoin is a designed to support cultural initiatives in the metaverse, governed by the community through the ApeCoin DAO.
- Curve (CRV): Curve is a protocol on Ethereum that facilitates the trading of stablecoins through user-provided liquidity pools, allowing stablecoins to be traded with low fees and minimal variation in price.
- Axie Infinity (AXS): Axie Infinity is a turn-based card game built on the Ethereum network that allows players to breed, raise, battle and trade Axie creatures.

Source: CF Benchmarks LTD., Kraken.com, apecoin.com

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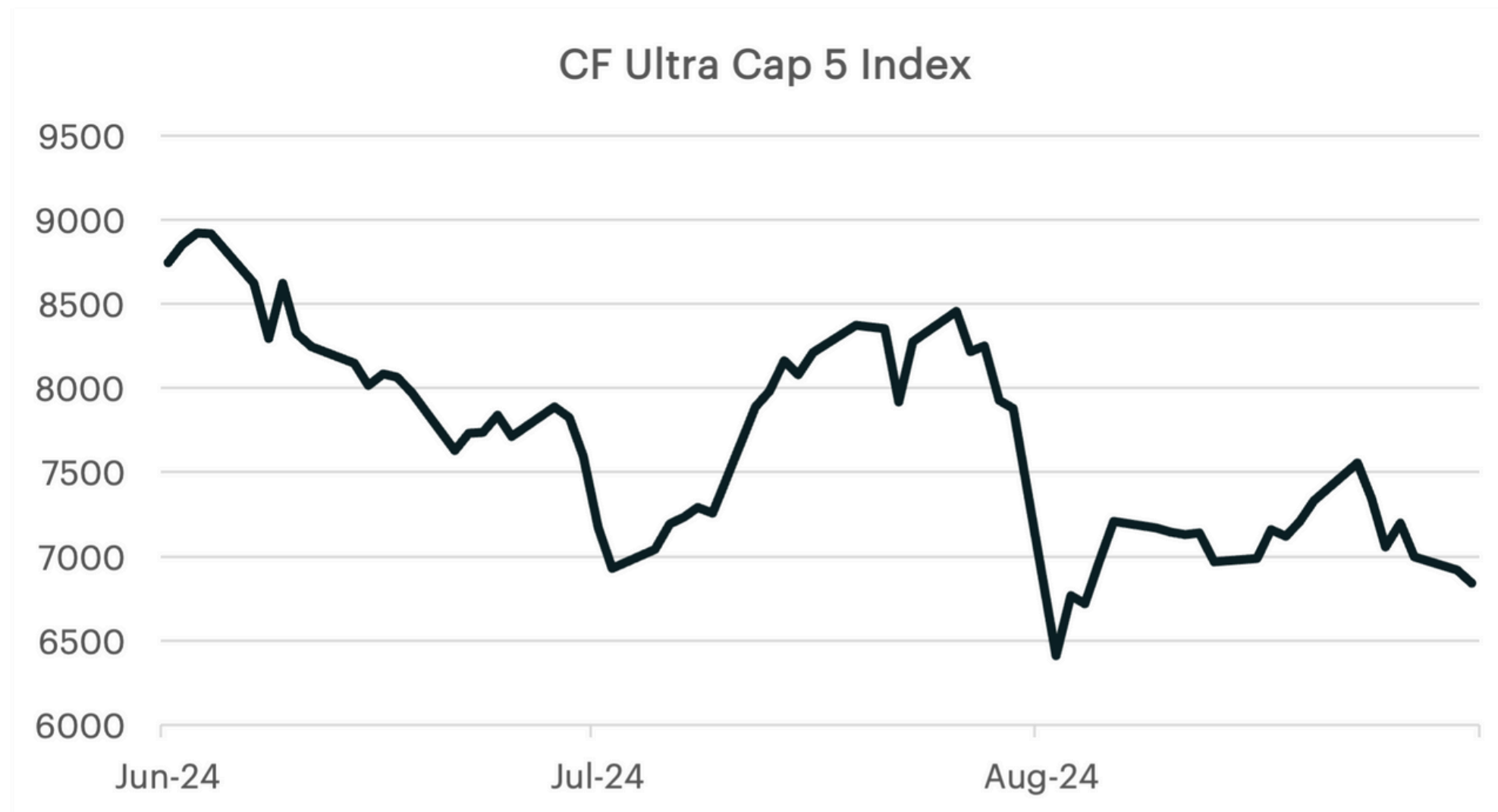
The CF Cryptocurrency Ultra Cap 5 (CFUC5) is an investible benchmark index tracking the performance of a free float market capitalization weighted portfolio of the 5 largest cryptocurrencies by market capitalization. It is the first true measure of the market beta of cryptocurrencies being a Registered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

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

Constituent changes: CF Ultra Cap 5 Index

Additions (+)
• None

Subtractions (-)
• None

Source: CF Benchmarks LTD., Kraken.com

The CF Diversified Large Cap Index
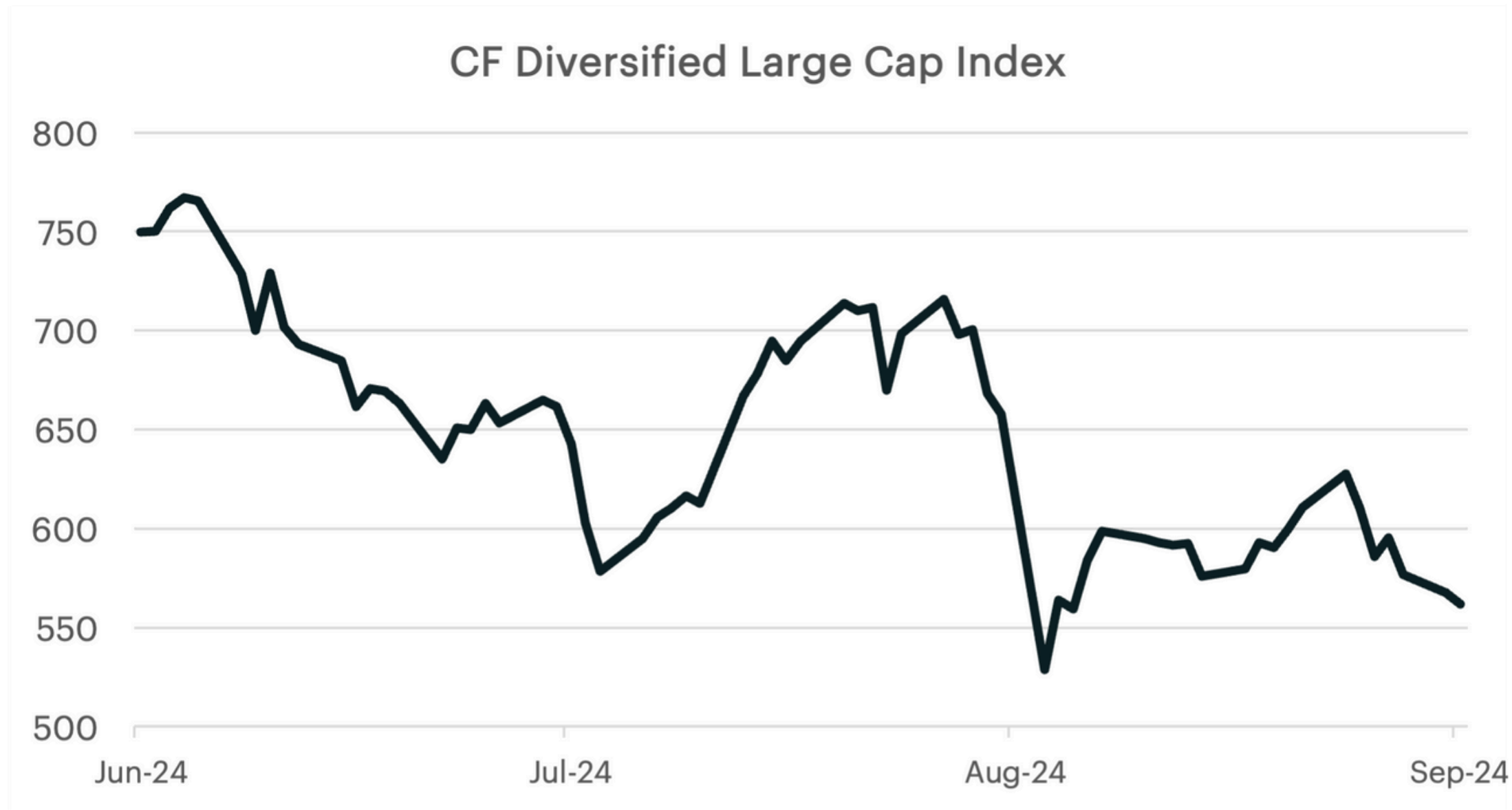
The CF Diversified Large Cap Index - is a liquid, investible benchmark portfolio index designed to track the performance of large-cap digital assets. The index seeks to capture 95% of the total market capitalization of the investible digital asset universe as its constituents. Index constituents are 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.

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

Constituent changes: CF Diversified Large Cap Index

Additions (+)

- None

Subtractions (-)

- Avalanche (AVAX): Avalanche is a blockchain platform that tackles the blockchain trilemma of scalability, security, and decentralization through its Proof of Stake mechanism, supporting Ethereum-compatible smart contracts and using its native token for transactions, governance, and rewards.
- Stellar Lumens (XLM): Stellar is a layer-1 blockchain that enables decentralized application development, asset issuance, and integration with existing financial rails.
- Polkadot (DOT): Polkadot is a blockchain platform that enables users to launch and operate their own customizable blockchains, called parachains, which are secured by a central relay chain, offering scalability, privacy, and efficiency within a unified ecosystem.

The CF DeFi Composite Index

CF DeFi Composite Index
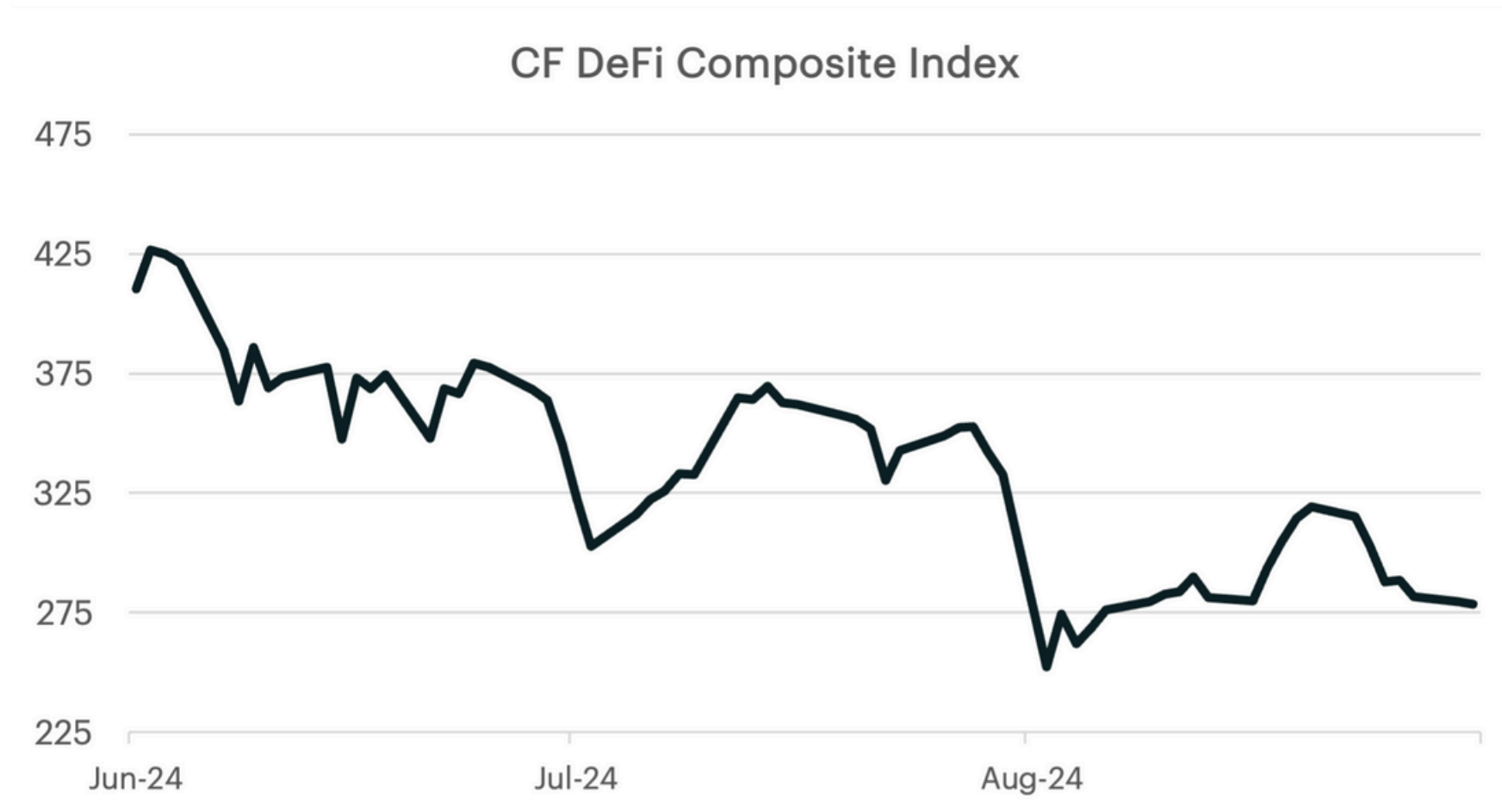
The CF DeFi Composite Index - London is a liquid, investible benchmark portfolio index that tracks the return performance of decentralised financial services, commonly referred to as "DeFi". The index is comprised of three distinct sub-portfolios of fixed weight that represent the components of blockchain architecture that are required to deliver decentralised financial services to individual and institutional end users; decentralized applications (dApps) via DeFi protocols, Services and Settlement Blockchains. Digital assets are classified in accordance with the CF Digital Asset Classification Structure (DACS) for sub-portfolio eligibility. The index is calculated and published once a day at 4:00pm London Time. The index is re-constituted on a twice yearly basis and rebalanced quarterly.

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

Constituent changes: CF DeFi Composite Index

Additions (+)

- Ondo (ONDO): Ondo Finance seeks to bridge the gap between traditional and decentralized finance by improving accessibility to institutional grade financial products through tokenized real works assets.

Subtractions (-)

- Curve (CRV): Curve is a protocol on Ethereum that facilitates the trading of stablecoins through user-provided liquidity pools, allowing stablecoins to be traded with low fees and minimal variation in price.
- Compound (COMP): Compound is a DeFi protocol on Ethereum that enables users to lend and borrow cryptocurrencies through automated lending pools, rewarding participants with interest and COMP tokens.

Source: CF Benchmarks LTD., Kraken.com

Constituent changes: CF Web 3.0 Smart Contract Platforms Index
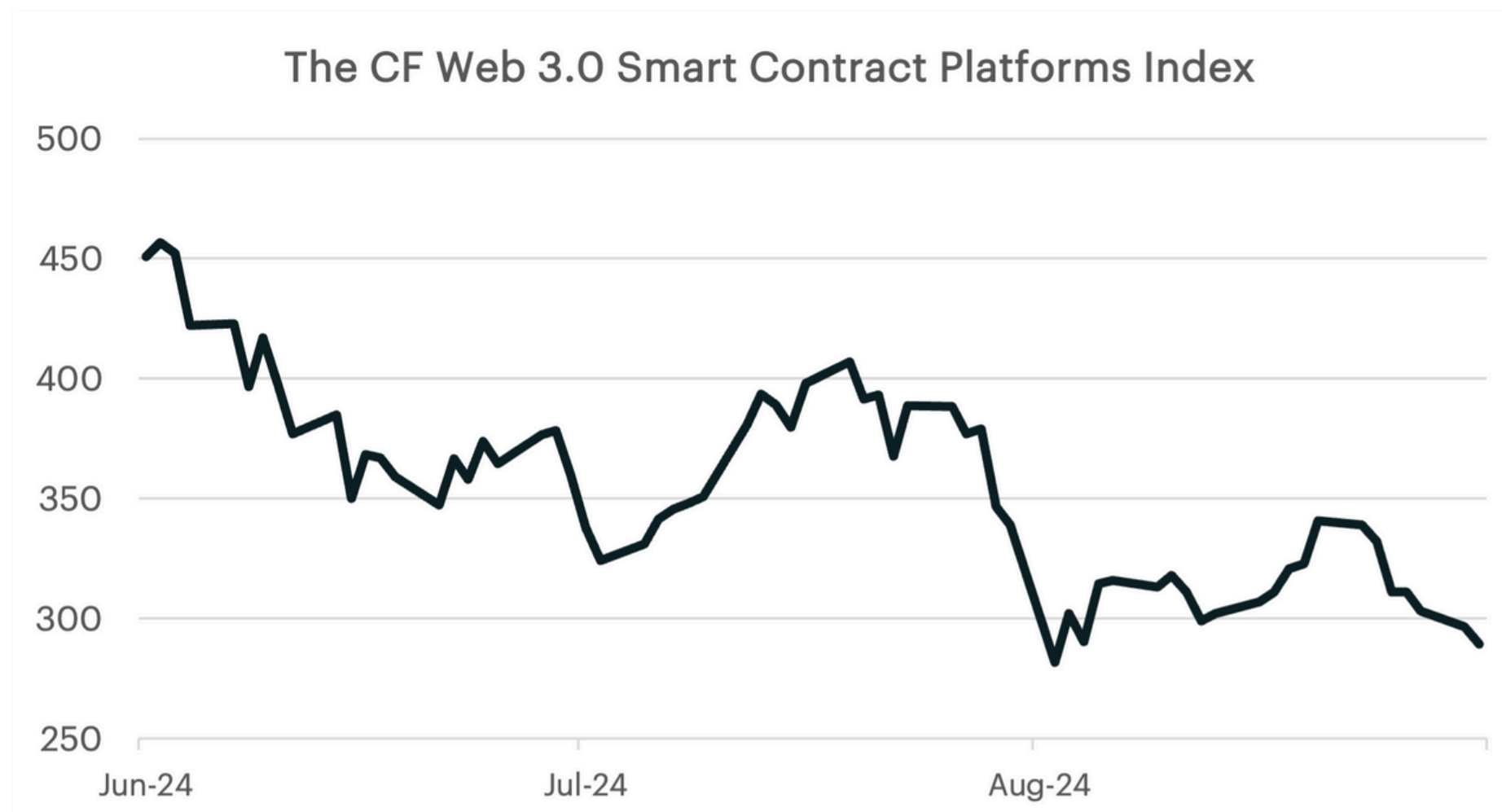
The CF Web 3.0 Smart Contract Platforms Index - London is a liquid, investible benchmark portfolio index that tracks the return performance of Smart Contract Platforms within the Digital Asset space. The index seeks to capture returns of all eligible protocols under the Settlement category and Programmable sub-category of the CF Digital Asset Classification Structure. Index constituents are weighted by 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 4:00pm London Time. The index is re-constituted and rebalanced quarterly. The CF Web 3.0 Smart Contract Platforms Index - London was incepted 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, Bloomberg, as of September 3, 2024

Constituent changes: CF Web 3.0 Smart Contract Platforms Index

Additions (+)

- Stacks (STX): Stacks is a scaling solution designed to improve the Bitcoin blockchain by offering a faster and more cost-effective environment for smart contract execution while using Bitcoin's security as its base layer.

Subtractions (-)

- Immutable X (IMX): Immutable specializes in blockchain solutions for the gaming industry, with its Layer 2 platform, Immutable X, providing gas-free, scalable transactions for Ethereum-based games and NFTs.

The CF Digital Culture Composite Index

CF Digital Culture Index

The CF Digital Culture Composite Index - London 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; decentralized applications (dApps) via Digital Culture protocols, 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, Bloomberg, as of September 3, 2024

Constituent changes: CF Digital Culture Index

Additions (+)

- Immutable X (IMX): Immutable specializes in blockchain solutions for the gaming industry, with its Layer 2 platform, Immutable X, providing gas-free, scalable transactions for Ethereum-based games and NFTs.

Subtractions (-)

- Ape Coin (APE): ApeCoin is a designed to support cultural initiatives in the metaverse, governed by the community through the ApeCoin DAO.
- Axie Infinity (AXS): Axie Infinity is a turn-based card game built on the Ethereum network that allows players to breed, raise, battle and trade Axie creatures.

Source: CF Benchmarks LTD., Kraken.com, apecoin,com,

The CF Blockchain Infrastructure Index

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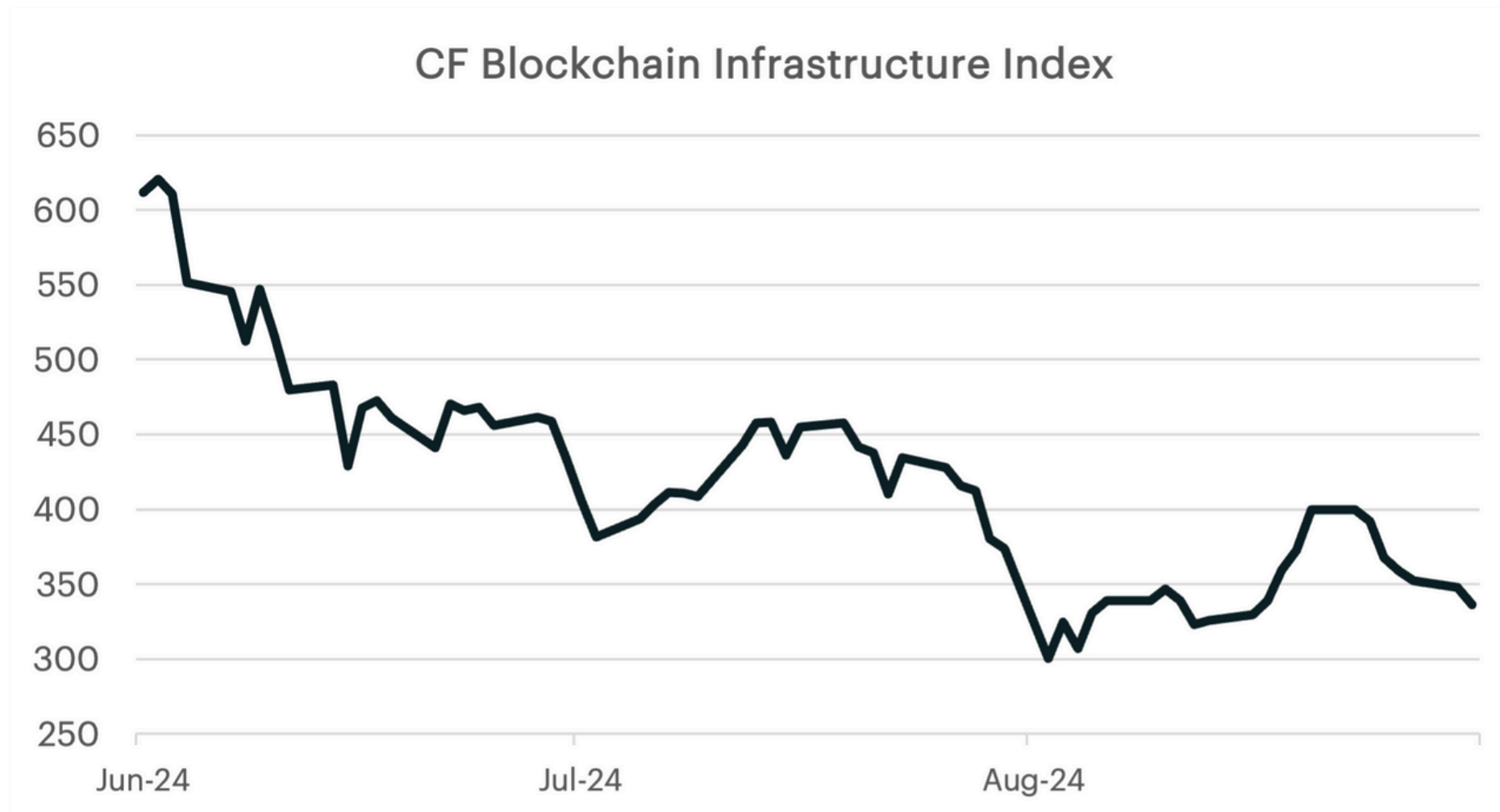
The CF Blockchain Infrastructure Index is a liquid, investible benchmark portfolio index that tracks the return performance of blockchain services within the Digital Asset space. The index seeks to capture returns of all eligible protocols under the Services category of the CF Digital Asset Classification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

The CF Blockchain Infrastructure Index - London was incepted on April 1st 2022 with a value of 1,000. The index was launched on May 17th 2022, all values from inception date to launch date provided are backtested.

Source: CF Benchmarks, Bloomberg, as of September 3, 2024

Constituent changes: CF Blockchain Infrastructure Index

Additions (+)

- JasmyCoin (JASMY): Jasmy develops internet of things (IoT) platforms via edge computing and the use of the InterPlanetary File System (IPFS) for data storage. Jasmy seeks to decentralize the maintenance and sharing of sensitive information.

Subtractions (-)

- Helium (HNT): Helium is a blockchain-based wireless network that allows devices to access the internet without requiring cellular service or satellite location hardware.
- Immutable X (IMX): Immutable specializes in blockchain solutions for the gaming industry, with its Layer 2 platform, Immutable X, providing gas-free, scalable transactions for Ethereum-based games and NFTs.

Source: CF Benchmarks LTD., Kraken.com

CF Digital Asset Classification Structure

CF Digital Asset Classification Structure

The CF Digital Asset Classification Structure (CF 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.

CF Digital Asset Classification Structure

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
- CF Broad Cap Index Market Cap Weight
- CF Broad Cap Index Diversified Weight

Contact us

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

info@cfbenchmarks.com

Appendix

Disclaimer and Disclosures

Appendix

Disclaimer and Disclosures (cont.)

Appendix

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