

# CF Benchmarks Quarterly Attribution Report

Attribution Analysis: September 3, 2025 - December 1, 2025





# Market Recap



## Uncertainty and Liquidations Collide with Monetary Tailwinds & Adoption Breakthroughs

The latest rebalance period showed a market navigating tightening macro conditions even as market access broadened and adoption accelerated. The two forces didn't always move in sync. September defied its typical seasonal weakness after the Fed cut rates for the first time in the cycle, citing labor market concerns and sparking robust flows into spot Bitcoin ETFs. More importantly, the SEC approved generic listing standards for commodity-based trust shares, clearing the path for crypto ETPs beyond Bitcoin and Ether without bespoke approval processes. U.S. regulators were no longer gatekeeping every product launch, opening the door for expanded derivative coverage across multiple tokens.

October marked an accessibility inflection point. The first U.S. spot Solana staking ETF launched under the new listing framework, drawing over \$400M in its first week. The response confirmed that allocators want broader digital asset exposure and staking yields when packaged in familiar wrappers. CME expanded derivatives markets to include Solana and XRP options, while the FOMC delivered another 25 bp cut and signaled slower balance sheet reduction. Mid-month volatility tested conviction sharply when Trump's October 10th tariff announcement on China triggered the largest liquidation event in crypto history, wiping out over \$19 billion in leveraged positions and briefly driving Bitcoin below \$105,000. By month-end, however, flows showed investors building positions across BTC, ETH, and SOL rather than concentrating solely in Bitcoin.

November refocused investor attention on the macro environment. Fading December rate cut expectations, persistent inflation concerns, and rising cross-asset volatility drove Bitcoin into the low-\$80Ks and triggered some of the year's heaviest weekly outflows. Infrastructure development continued regardless of sentiment. CME and CF Benchmarks launched the Bitcoin Volatility Indices (BVX/BVXS) just as hedging demand increased, giving institutional participants regulated tools to manage tail risk for the first time.

The latest rebalance period underscored the importance of size and liquidity as escalating macro uncertainty drove broad deleveraging and culminated in October's historic liquidation event. Capital rotated decisively into the deepest, most institutionally supported assets, primarily Bitcoin and Ether, while smaller-cap segments lacked the market depth to absorb outflows without severe price dislocation. This dynamic was evident across index performance: the CF Cryptocurrency Ultra Cap 5 Index declined 26.99% and the CF Free Float Broad Cap Index fell 27.76%, reflecting the relative resilience of mega-caps. More diversified exposures saw steeper losses, with the CF Diversified Large Cap and CF Diversified Broad Cap indices down 31.37% and 32.19%, respectively. Higher-beta sectors absorbed the most pressure, as the CF Web 3.0 Smart Contract Platforms and CF DeFi Composite indices declined 45.43% and 47.44%, and the CF Digital Culture Composite Index fell 50.04%, underscoring how liquidity premia and market depth defined relative returns during the downturn.





# Attribution Analysis: CF Broad Cap Indices

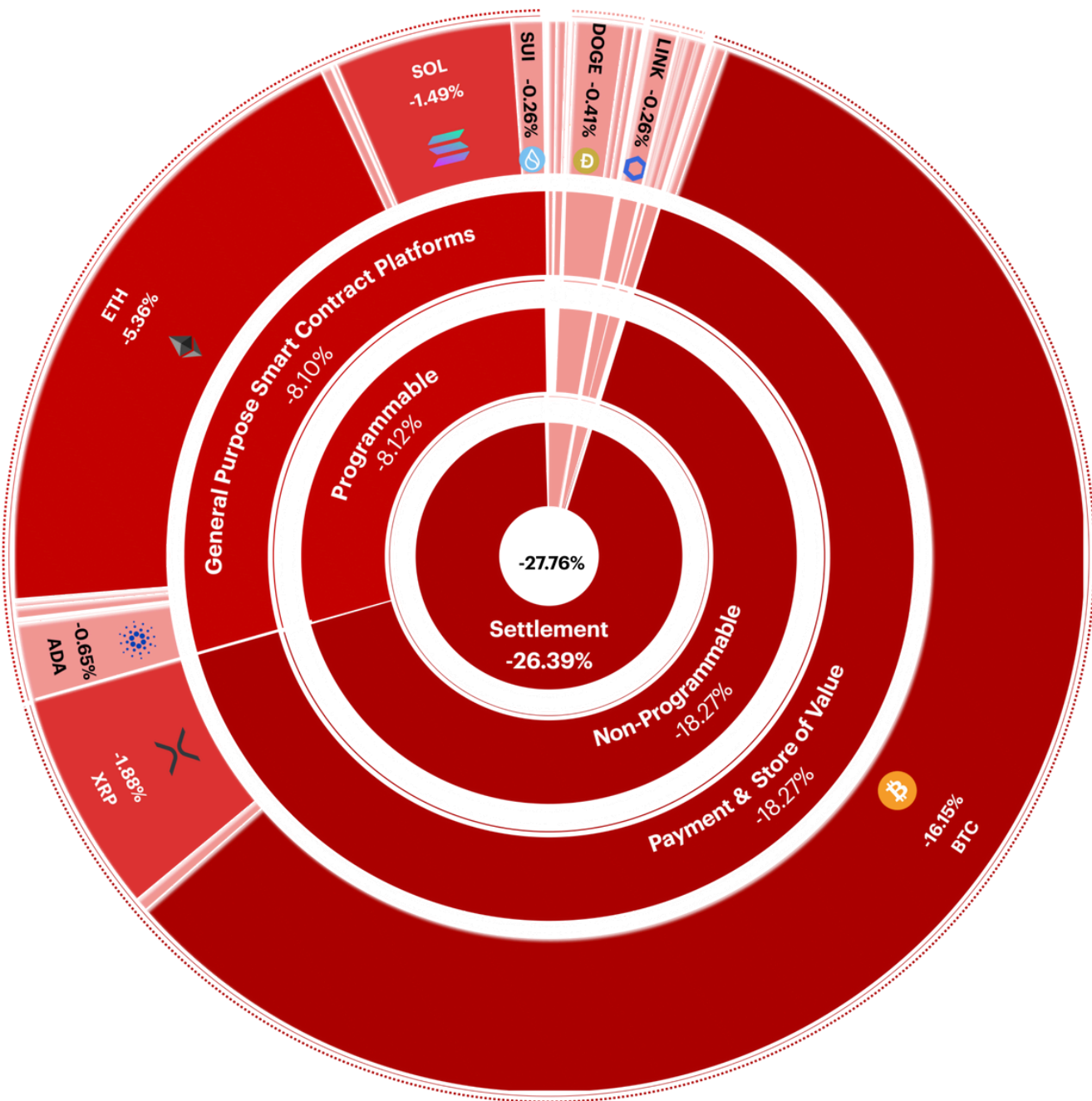


# Performance Attribution (Free Float Market Cap)



## Index Return Contribution

Total Performance Contribution: -27.76%      Date: 1st December 2025



Category	Sub-Category		Segment	Asset	
Sectors	Finance	-0.19%	Trading	-0.07%	
			Asset & Wealth Management	-0.01%	
			Borrowing & Lending	-0.11%	
	Culture	-0.64%	Gaming	-0.00%	
			VR & AR	-0.01%	
			Meme Coins	-0.63%	
	Services	Infrastructure	-0.24%	Scaling	-0.17%
				Interoperability	-0.00%
				Computing	-0.07%
Oracles				-0.26%	
Identity				-0.01%	
Utility		-0.30%	Information & Data Management	-0.03%	
Settlement	Programmable	-8.12%	General Purpose Smart Contract Platforms	-8.10%	
	Non-Programmable	-18.27%	Specialized Purpose Smart Contract Platforms	-0.02%	
Settlement	Non-Programmable	-18.27%	Payment & Store of Value	-18.27%	

- The CF Free-Float Broad Cap Index declined 27.76% over the most recent rebalancing period, outperforming its diversified counterpart by roughly 400 basis points.
- Bitcoin (BTC) was the largest detractor, subtracting 16.14% from total performance, followed by Ether (ETH) at -5.36%. Together, they accounted for the majority of the index’s decline.
- From a CF Digital Asset Classification Structure (DACS) perspective, the index’s heavier exposure to the Settlement category made it the leading source of negative contribution, driven primarily by the non-programmable sub-category.



# Index Weights (Free Float Market Cap)



## 2nd September 2025

Total Weight: 100%      Index Value: 4299.79

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Finance	Trading	0.16%
		Asset & Wealth Management	0.02%
		Borrowing & Lending	0.22%
		Gaming	0.01%
	Culture	VR & AR	0.02%
		Meme Coins	0.16%
			0.02%
			0.17%
			0.06%
			0.01%
Services	Infrastructure	Scaling	0.29%
		Interoperability	0.04%
		Computing	0.19%
	Utility	Oracles	0.53%
		Identity	0.03%
		Information & Data Management	0.07%
Settlement	Programmable	General Purpose Smart Contract Platforms	21.01%
			0.03%
			75.78%
			0.11%
			0.33%
			0.31%
			68.34%
			0.31%
			6.48%
			0.06%
			0.02%
			0.02%
			0.20%
			0.10%
			0.06%
			14.70%
			0.22%
			0.05%
			0.11%
			3.85%
			0.44%
			0.03%
			0.33%
			0.31%
			68.34%
			0.31%
			6.48%

## 1st December 2025

Total Weight: 100%      Index Value: 3106.08

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Finance	Trading	0.14%
		Asset & Wealth Management	0.09%
		Borrowing & Lending	0.16%
		Diversified Financial Services	0.10%
	Culture	Gaming	0.01%
		VR & AR	0.01%
		Social	0.06%
		Meme Coins	1.36%
			0.14%
			0.07%
Services	Infrastructure	Scaling	0.16%
		Interoperability	0.06%
		Computing	0.18%
	Utility	Oracles	0.38%
		Identity	0.08%
		Information & Data Management	0.06%
Settlement	Programmable	General Purpose Smart Contract Platforms	17.70%
			0.07%
			79.40%
			0.76%
			0.04%
			0.01%
			0.01%
			0.15%
			0.06%
			0.04%
			12.72%
			0.22%
			0.06%
			0.10%
			3.27%
			0.25%
			0.02%
			0.05%
			0.41%
			0.29%
			71.92%
			0.32%
			6.46%

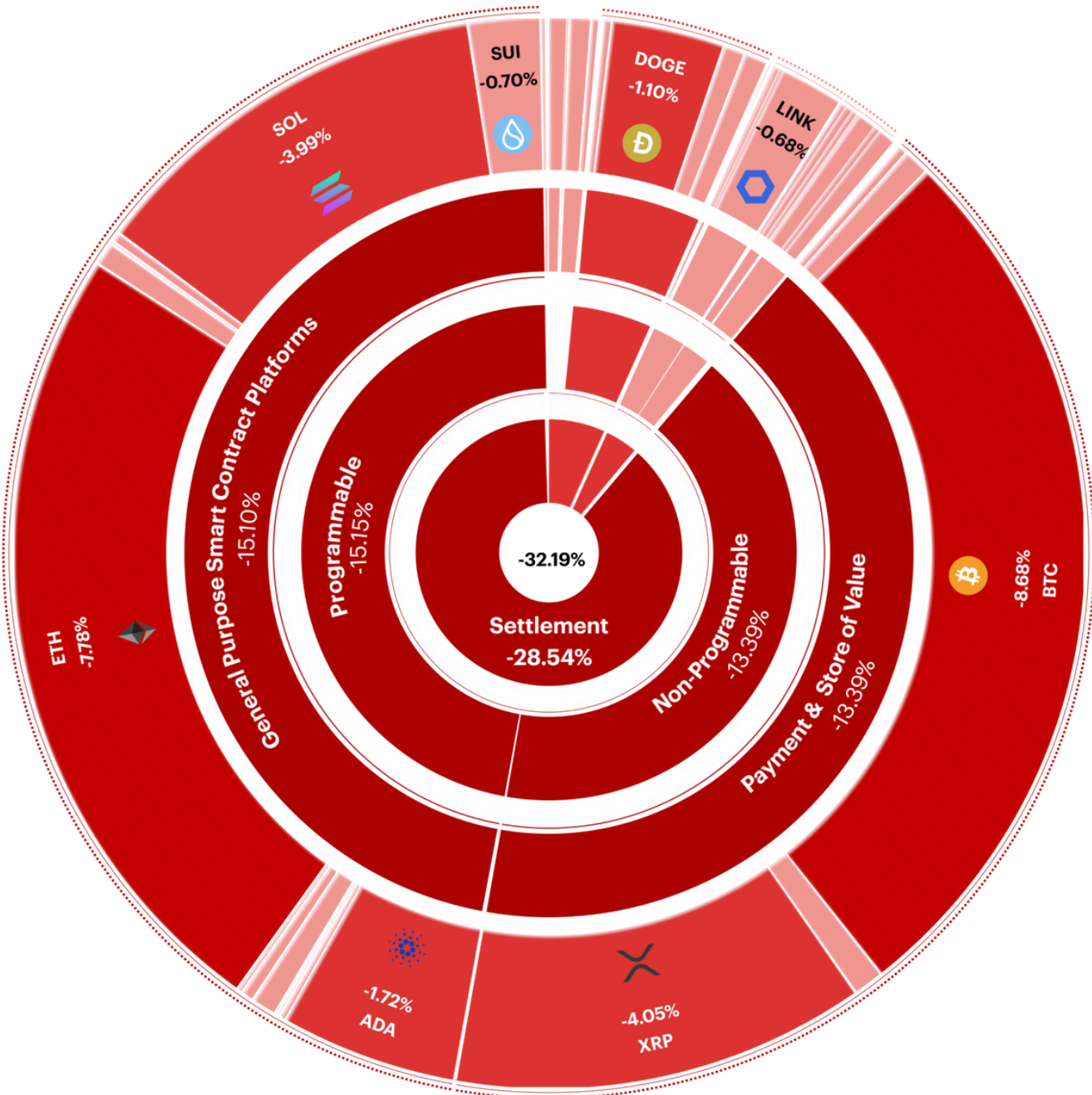


# Performance Attribution (Diversified Weight)



## Index Return Contribution

Total Performance Contribution: -32.19%      Date: 1st December 2025



CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Finance	Trading	-0.18%
		Asset & Wealth Management	-0.03%
		Borrowing & Lending	-0.29%
	Culture	Gaming	-0.01%
		VR & AR	-0.02%
		Meme Coins	-1.68%
Services	Infrastructure	Scaling	-0.46%
		Interoperability	-0.01%
		Computing	-0.18%
		Oracles	-0.68%
	Utility	Identity	-0.04%
		Information & Data Management	-0.07%
Settlement	Programmable	General Purpose Smart Contract Platforms	-15.10%
		Specialized Purpose Smart Contract Platforms	-0.05%
	Non-Programmable	Payment & Store of Value	-13.39%

- The CF Diversified Broad Cap Index declined 32.19% over the most recent rebalancing period, underperforming the free-float variant due to its greater small-cap tilt.
- Bitcoin (BTC) was the largest detractor, subtracting 8.67%, while Ether (ETH) detracted 7.78%. Together, they accounted for the majority of total losses.
- From a CF Digital Asset Classification Structure (DACS) perspective, Ether’s larger weighting in the diversified index meant the Programmable Settlement category, specifically General Purpose Smart Contract Platforms, contributed the lion’s share of negative performance.

Source: CF Benchmarks, as of December 1, 2025












































# Index Weights (Diversified Weight)



## 2nd September 2025

Total Weight: 100%      Index Value: 3717.94

Category	Sub-Category		Segment		Asset	
Sectors	Finance	1.10%	Trading	0.44%	 UNI	0.44%
			Asset & Wealth Management	0.07%	 LDO	0.07%
			Borrowing & Lending	0.60%	 AAVE	0.44%
	Culture	4.35%	Gaming	0.03%	 IMX	0.03%
			VR & AR	0.04%	 SAND	0.04%
			Meme Coins	4.28%	 BONK	0.14%
					 DOGE	2.97%
					 PEPE	0.36%
					 SHIB	0.65%
					 TRUMP	0.17%
Services	Infrastructure	1.38%	Scaling	0.76%	 ARB	0.28%
					 OP	0.11%
			Interoperability	0.12%	 POL	0.31%
					 STX	0.03%
					 TIA	0.03%
	Utility	1.65%	Computing	0.50%	 QNT	0.12%
					 FET	0.09%
			Oracles	1.40%	 RENDER	0.13%
					 TAO	0.28%
					Identity	0.07%
 ENS	0.07%					
Information & Data Management	0.18%	 FIL	0.13%			
Settlement	Programmable	38.26%	General Purpose Smart Contract Platforms	38.18%	 GRT	0.05%
					 ADA	3.18%
					 ALGO	0.15%
					 APT	0.05%
					 ATOM	0.04%
					 AVAX	0.53%
					 DOT	0.26%
					 ETC	0.15%
					 ETH	21.35%
					 HBAR	0.59%
Settlement	Non-Programmable	53.25%	Specialized Purpose Smart Contract Platforms	0.09%	 ICP	0.13%
					 NEAR	0.29%
					 SOL	10.27%
					 SUI	1.18%
					 SEI	0.09%
					 BCH	0.89%
					 LTC	0.82%
					 BTC	36.74%
					 XLM	0.83%
					 XRP	13.97%

## 1st December 2025

Total Weight: 100%      Index Value: 2521.21

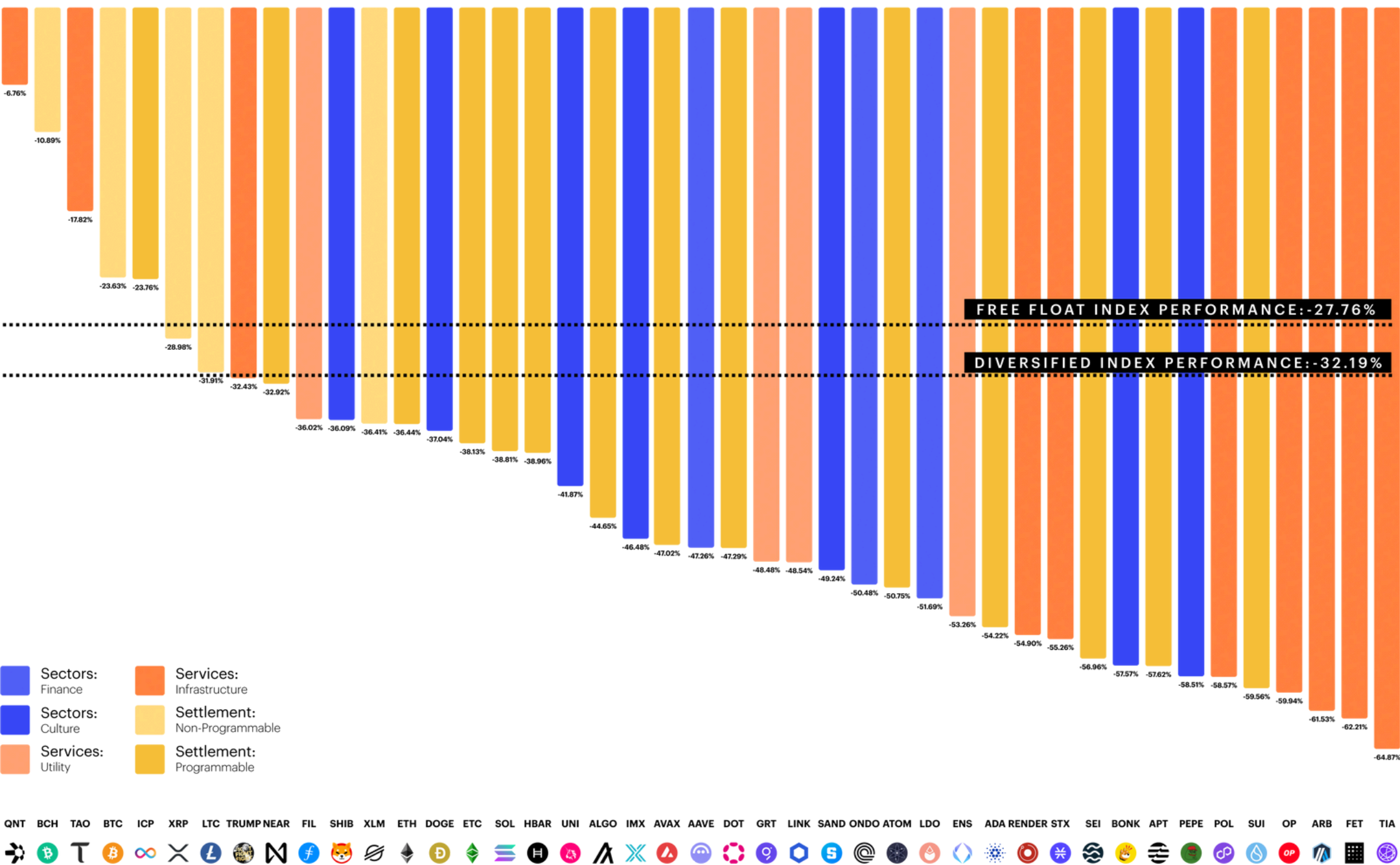
Category	Sub-Category		Segment		Asset	
Sectors   <						



# Quality Divergence Amid Macro-Driven Weakness



## Absolute Performance



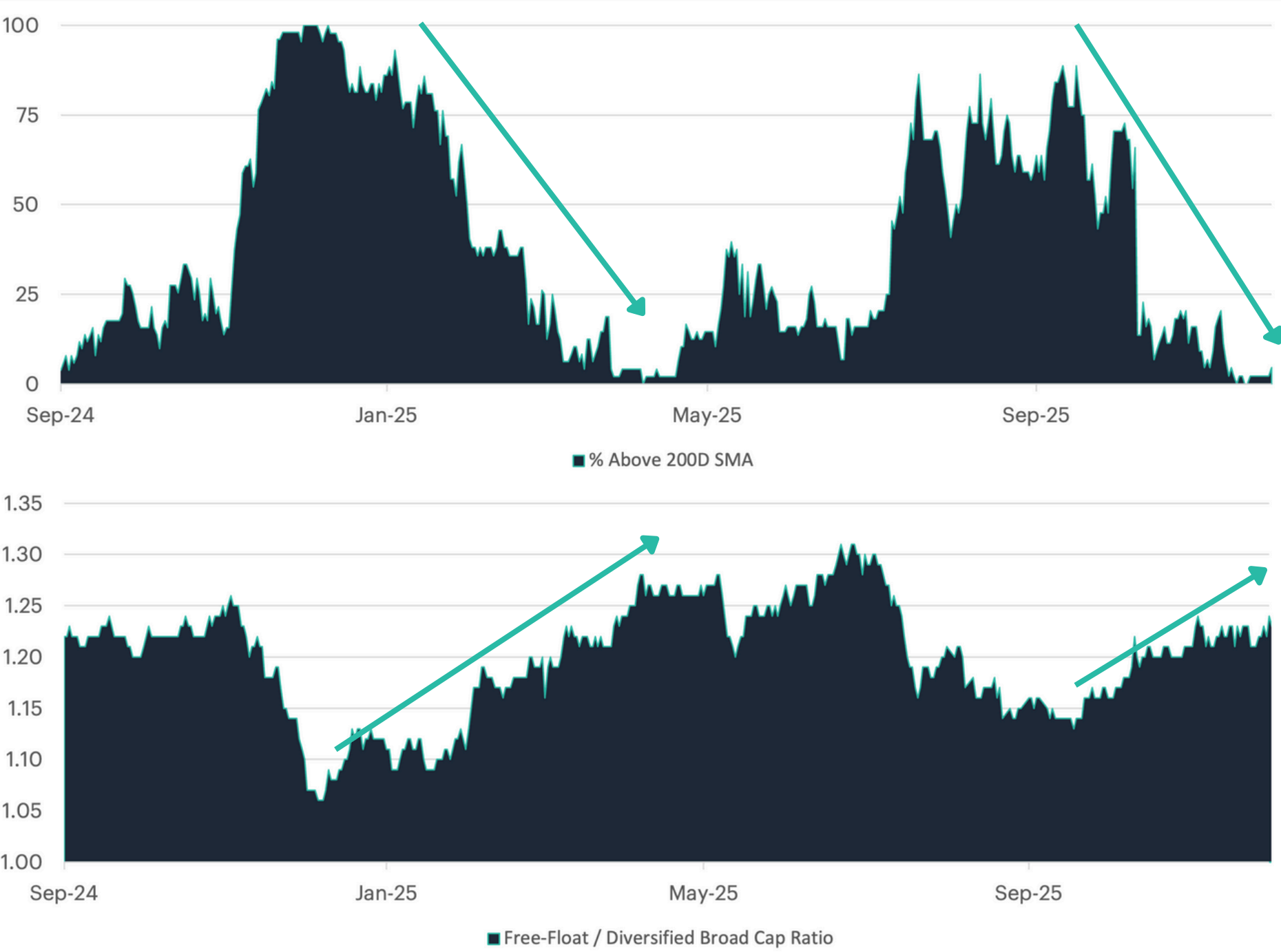
Constituent performance was broadly negative and dispersed over the most recent rebalancing window, with relative strength confined to a handful of resilient, infrastructure-oriented names. Quant (QNT, -6.8%) showed notable outperformance as investors rewarded its expanding tokenization stack, including the launch of QuantNet and Quant Fusion, which reinforced its role in programmable settlement rails for banks. Bitcoin Cash (BCH, -10.9%) also held up comparatively well amid rising open interest and renewed institutional demand during the broader altcoin sell-off. Bittensor (TAO, -17.8%) remained volatile but found support from ongoing interest in its AI subnet model despite sector-wide weakness across AI tokens.

On the downside, losses were heavily concentrated in high-beta themes. Celestia (TIA, -64.9%), Fetch.ai (FET, -62.2%), and Arbitrum (ARB, -61.5%) led declines, pressured by aggressive unlocks and soft usage, legal uncertainty around ASI-related FET selling, and anticipated ARB unlocks expanding free float, respectively.

Source: CF Benchmarks, as of December 1, 2025



# Defensive Rotation Narrows Market Breadth



The degree to which Bitcoin and Ether outperform mid- and smaller-cap tokens during drawdowns serves as a reliable barometer for market risk sentiment. The CF Free-Float Index captures this mega-cap exposure, while the Diversified Broad Cap methodology spreads weight more evenly across the market-cap spectrum. As shown in the lower panel, the performance ratio between these benchmarks has historically spiked during risk-off episodes, most notably during April's trade-war-driven selloff following "Liberation Day" tariff announcements. The current period mirrors that dynamic: the ratio has risen back toward recent highs, confirming that mega-cap assets have once again declined less than broader altcoin exposure.

This defensive positioning is corroborated by market breadth in the upper panel. The percentage of tokens trading above their 200-day moving average, which approached 90% during peak risk appetite earlier in 2024, collapsed to single digits by year-end and remains suppressed. The simultaneous rise in the free-float ratio and deterioration in breadth confirms the recent environment has been characterized by concentration rather than participation. Leadership is confined to the most liquid assets, while the vast majority of tokens have broken below long-term trend support. For sustainable broadening, where diversified exposure outperforms and breadth expands, market conditions would need to stabilize, with easing macro uncertainty and returning risk appetite allowing capital to rotate back down the quality curve.

Source: CF Benchmarks, Bloomberg, as of December 4, 2025



# 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						
0.47	0.51	0.47	0.51	0.36	0.43	0.21	0.56	0.50	0.53	0.54	0.44	-0.04	0.08	0.07	0.04	0.06	-0.03	-0.09	0.20	0.41	-0.46	-0.17	0.03	-0.01	0.13	-0.06	0.38	0.11	-0.43	-0.47	0.30						
Average Weekly Correlation over the current rebalance period.																																					
0.26	0.28	0.35	0.33	0.25	0.28	0.26	0.30	0.30	0.31	0.30	0.30	-0.16	-0.05	-0.03	-0.01	0.13	-0.09	0.00	0.03	0.29	-0.30	-0.02	0.06	-0.04	0.13	0.03	0.14	0.11	-0.28	-0.38	0.18						
Average Weekly Correlation over the prior rebalance period.																																					

Our updated multi-asset correlation matrix reveals a sharp rise in digital assets’ alignment with global equities during the current rebalance period. Weekly correlations between the CF Free-Float Broad Cap Index and major U.S. benchmarks strengthened materially, with the S&P 500 and Nasdaq 100 rising to 0.47 and 0.51, up from 0.26 and 0.28 previously. Correlations also climbed across broader equity markets: MSCI Europe increased to 0.43, MSCI EM to 0.56, and MSCI ACWI to 0.53–0.54, underscoring a pronounced shift toward equity-linked risk behavior. Fixed income relationships were more mixed. Most Treasury tenors remained near zero, with the 2-year at 0.08, the 5-year at 0.07, and the 10-year at 0.04, while the 3-month bill held slightly negative at -0.04. Risk-sensitive credit exposures strengthened, with Global High Yield rising to 0.41, echoing the period’s broader risk-on dynamics. Correlations with currencies and commodities stayed modest. The U.S. Dollar Index remained slightly negative (-0.17), gold edged marginally positive (0.03), and crude oil hovered near flat (-0.01). Industrial metals and energy commodities exhibited only moderate ties. Volatility benchmarks maintained their inverse relationship to digital assets. The MOVE Index fell to -0.47, reinforcing crypto’s historical tendency to outperform during periods of easing rate volatility. Overall, the most recent correlation structure shows that cryptocurrency markets are becoming more equity-sensitive, yet continue to offer diversification versus bonds, currencies, and real assets—preserving their role as a differentiated return stream within multi-asset portfolios.





# Attribution Analysis: CF Cryptocurrency Ultra Cap 5 Index

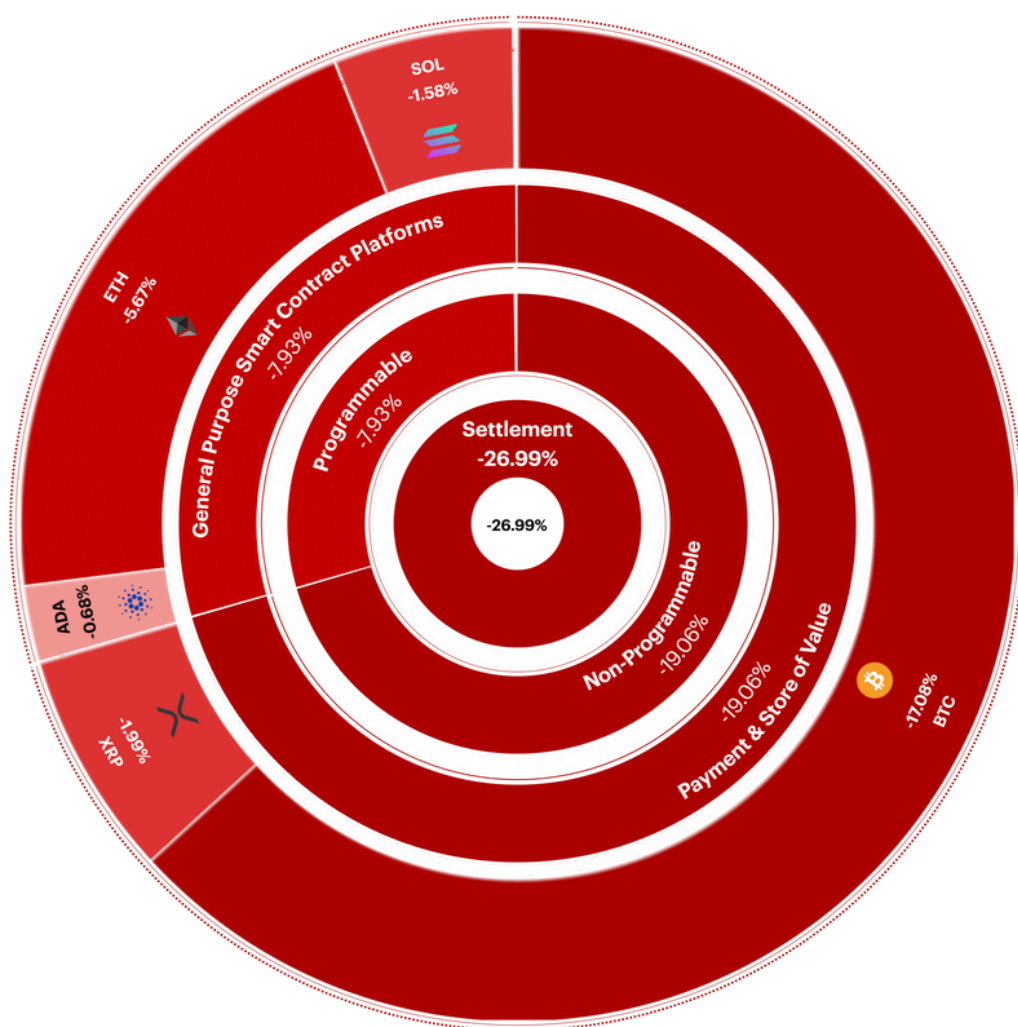





# Programmables Weigh Down Mega-caps



## Index Return Contribution

Total Performance Contribution: -26.99%      Date: 1st December 2025



CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Settlement	Programmable -7.93%	General Purpose Smart Contract Platforms -7.93%	 ADA -0.68%
			 ETH -5.67%
	Non-Programmable -19.06%	Payment & Store of Value -19.06%	 SOL -1.58%
			 BTC -17.08%
			 XRP -1.99%
			-26.99%

- Mega-cap tokens, as measured by our CF Cryptocurrency Ultra Cap 5 Index, fell 26.99% over the most recent rebalancing period, with losses dominated by Bitcoin and Ether. Bitcoin was the largest detractor, accounting for more than half of the total negative attribution (-17.08%) due to its higher market weighting.
- From a CF Digital Asset Classification Structure (DACs) perspective, this resulted in the Non-Programmable Settlement category driving the majority of the index’s contraction.








# Index Weights








## 2nd September 2025

Total Weight: 100%      Index Value: 13291.28

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Settlement	Programmable 20.88%	General Purpose Smart Contract Platforms 20.88%	 ADA 1.26%
			 ETH 15.55%
			 SOL 4.07%
	Non-Programmable 79.12%	Payment & Store of Value 79.12%	 BTC 72.27%
			 XRP 6.85%
	100%		

## 1st December 2025

Total Weight: 100%      Index Value: 9703.89

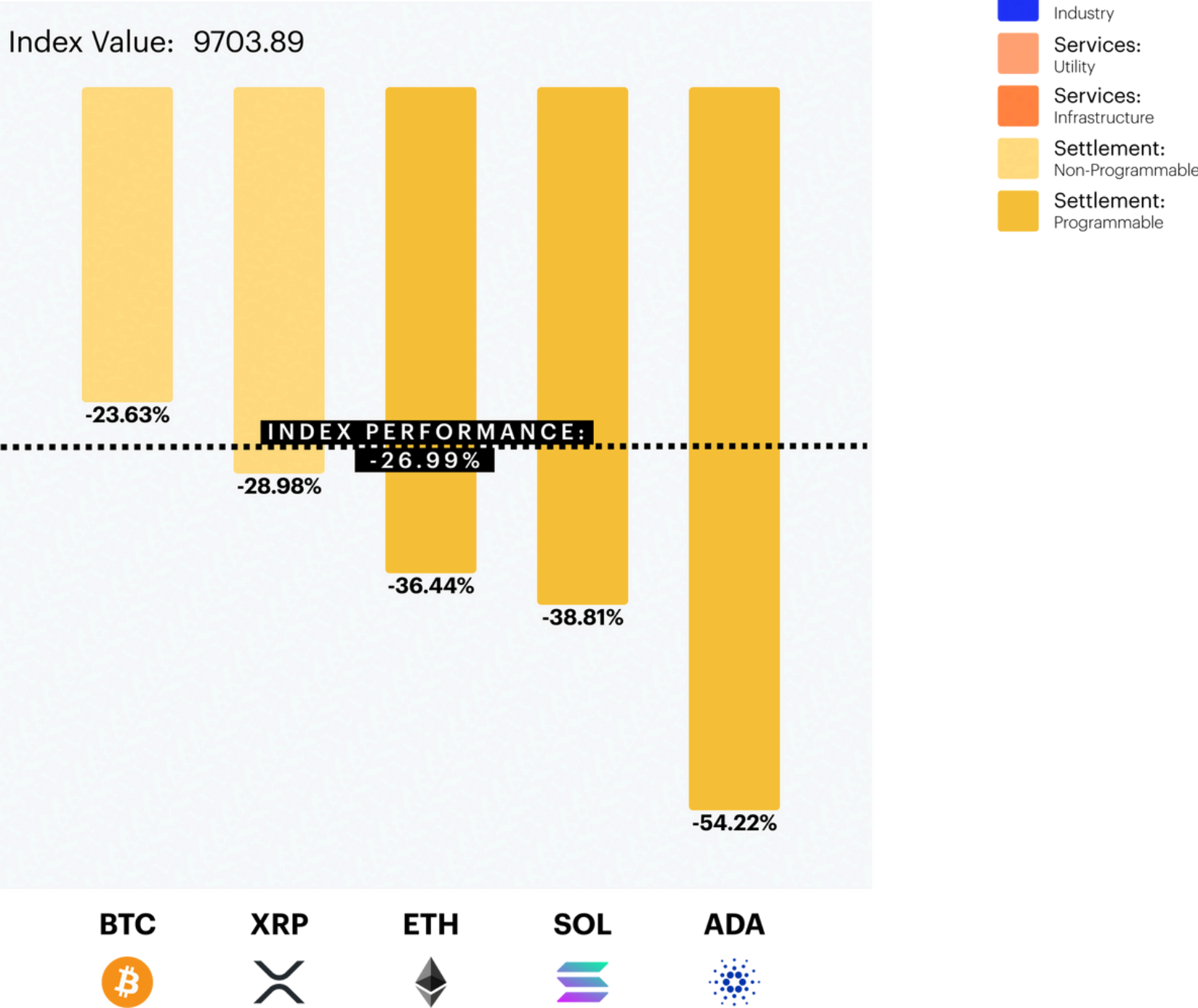
CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Settlement			 ADA 0.80%
			 ETH 13.37%
			 SOL 3.44%
			 BTC 75.60%
			 XRP 6.79%
100%	<div>Programmable 17.61%</div> <div>Non-Programmable 82.39%</div>	<div>General Purpose Smart Contract Platforms 17.61%</div> <div>Payment &amp; Store of Value 82.39%</div>	



# Bitcoin Outperforms as Smaller Constituents Lag



## Absolute Performance



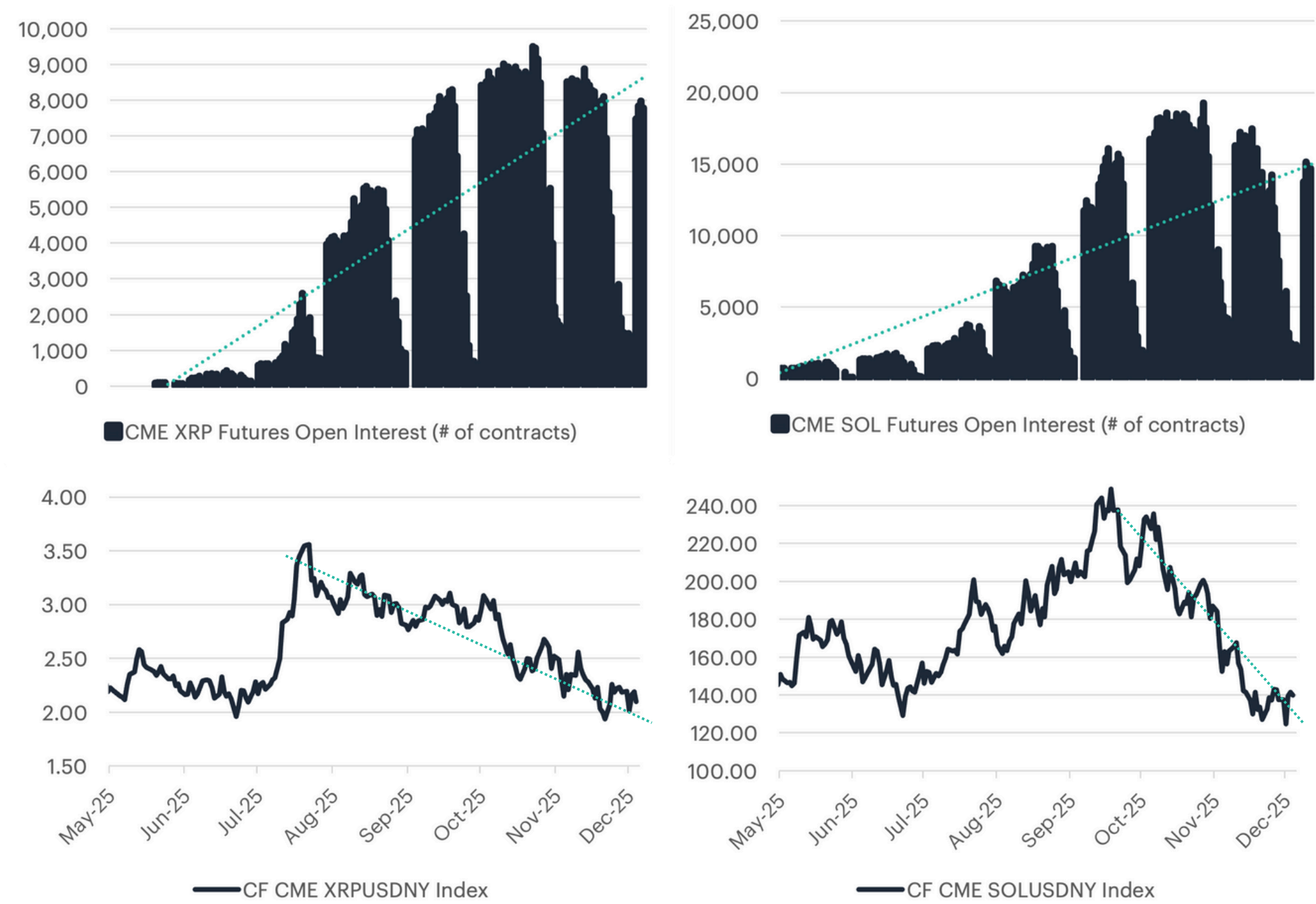
The CF Ultra Cap 5 Index declined 27% during the most recent rebalance period as crypto reversed from October highs and entered a broad drawdown. Bitcoin (XBT, -23.6%) showed relative outperformance: after peaking above \$126,000 in early October, it sold off on recalibrated Fed-cut expectations and roughly \$3.5 billion of net outflows from US spot ETFs, compounded by concerns that major digital asset treasury companies might trim their holdings.

Ethereum (ETH, -36.4%) and Solana (SOL, -38.8%) underperformed BTC, with slowing ETF demand, "crypto winter" headlines, and mixed macro signals weighing on ETH even as long-term narratives around staking and tokenization persisted. Solana's steeper decline reflected profit-taking after a strong run, a 59% drawdown from its January peak, and leveraged liquidations, despite continued growth in DEX market share.

Among other constituents, XRP (-29.0%) held up comparatively better than most altcoins, supported by speculation around potential ETF products, improving regulatory clarity, and whale accumulation. Cardano (ADA, -54.2%) was the clear laggard, extending a multi-year pattern of underperformance as investors questioned slow ecosystem traction and limited DeFi penetration, with ADA trading near late-2020 price levels despite periodic bursts of speculative interest.



# Institutional Divergence Emerges



The CME Group’s expansion beyond Bitcoin and Ethereum regulated futures, with Solana futures launching on March 17 and XRP futures following on May 19, has been a pivotal development for institutional access. With nearly all CF Ultra Cap 5 Index constituents now supported by regulated futures, the market has gained a deeper toolkit for hedging, cross-asset spreads, and more complex arbitrage structures. The charts highlight a clear institutional divergence over the recent rebalance window. XRP spot prices sank roughly 43 percent and Solana fell 42 percent amid broad risk-off flows, yet futures open interest moved in the opposite direction. XRP futures positioning remained elevated even as the underlying weakened, and SOL open interest climbed from about 5,000 contracts to peaks near 20,000.

This widening disconnect between spot performance and derivatives activity points to increasingly advanced positioning. Basis trades, relative-value structures, and hedging strategies appear to be absorbing more of the flows as professional capital leans into regulated venues. Rather than reflecting retail capitulation, the behavior resembles the early stages of structural maturation.

Source: CF Benchmarks, Bloomberg, as of December 5, 2025





# Attribution Analysis: CF Diversified Large Cap Index

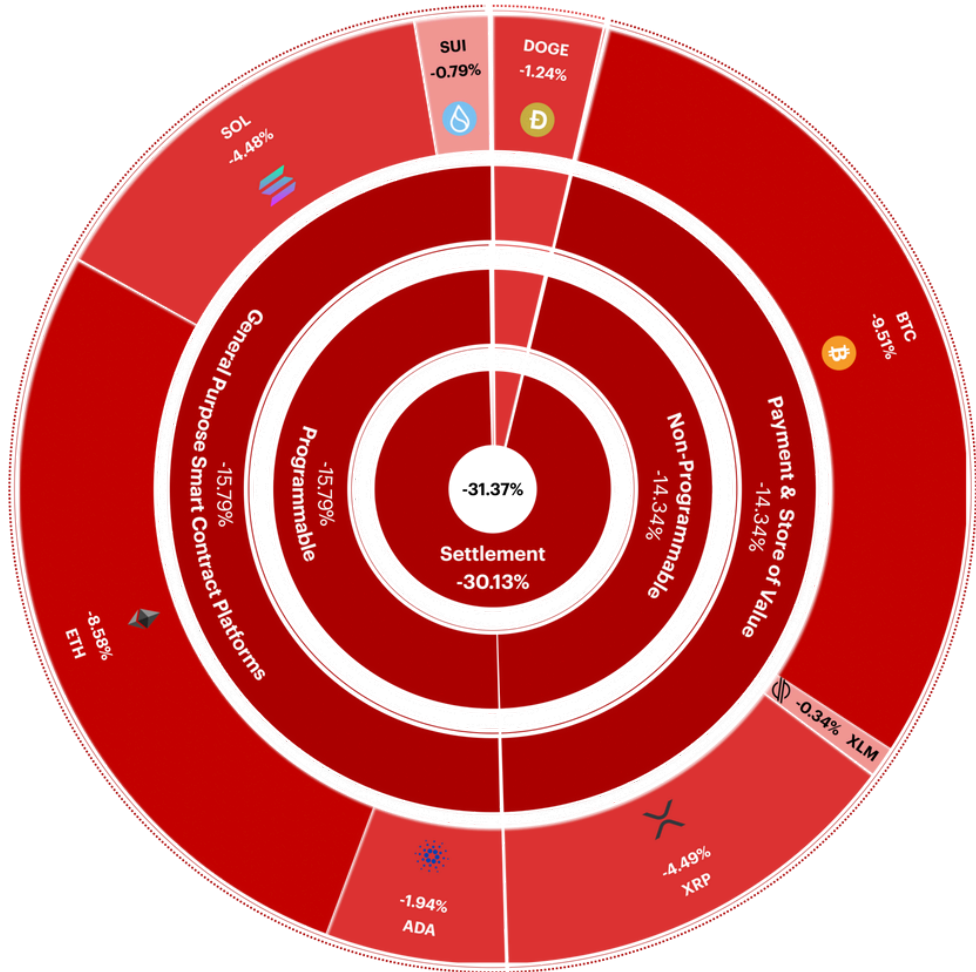


# Deleveraging Sell-Off Drives Large-Cap Reversal



## Index Return Contribution

Total Performance Contribution: -31.37%      Date: 1st December 2025



CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Culture	Meme Coins	DOGE
Settlement	Programmable	General Purpose Smart Contract Platforms	ADA
			ETH
			SOL
			SUI
	Non-Programmable	Payment & Store of Value	BTC
			XLM
			XRP

- Large-cap tokens sold off sharply, with the CF Diversified Large Cap Index declining 31.37%. Constituent contributions to the loss were led by Bitcoin (XBT, -9.51%) and Ether (ETH, -8.58%), followed by Solana (SOL, -4.48%) and XRP (-4.49%).
- From a CF DACS perspective, weakness was broad-based. Programmable assets (ETH, SOL, ADA, SUI) contributed -15.79% to index losses, Non-Programmable names (XBT, XRP, XLM) contributed -14.34%, while the smaller Culture allocation (DOGE, -1.24%) added modest further drag.



# Index Weights



## 2nd September 2025

Total Weight: 100%      Index Value: 1126.71

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 3.34%	Culture 3.34%	Meme Coins 3.34%	DOGE 3.34%
Settlement 96.66%	Programmable 40.00%	General Purpose Smart Contract Platforms 40.00%	ADA 3.57%
			ETH 23.55%
			SOL 11.54%
			SUI 1.33%
			BTC 40.24%
	Non-Programmable 56.67%	Payment & Store of Value 56.67%	XLM 0.93%
			XRP 15.50%

## 1st December 2025

Total Weight: 100%      Index Value: 773.31

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors 3.03%	Culture 3.03%	Meme Coins 3.03%	DOGE 3.03%
Services 1.17%	Utility 1.17%	Oracles 1.17%	LINK 1.17%
Settlement 95.80%	Programmable 36.25%	General Purpose Smart Contract Platforms 36.25%	ADA 2.37%
			ETH 22.95%
			SOL 10.17%
			SUI 0.76%
			BTC 42.50%
	Non-Programmable 59.55%	Payment & Store of Value 59.55%	XLM 0.98%
			XRP 16.07%

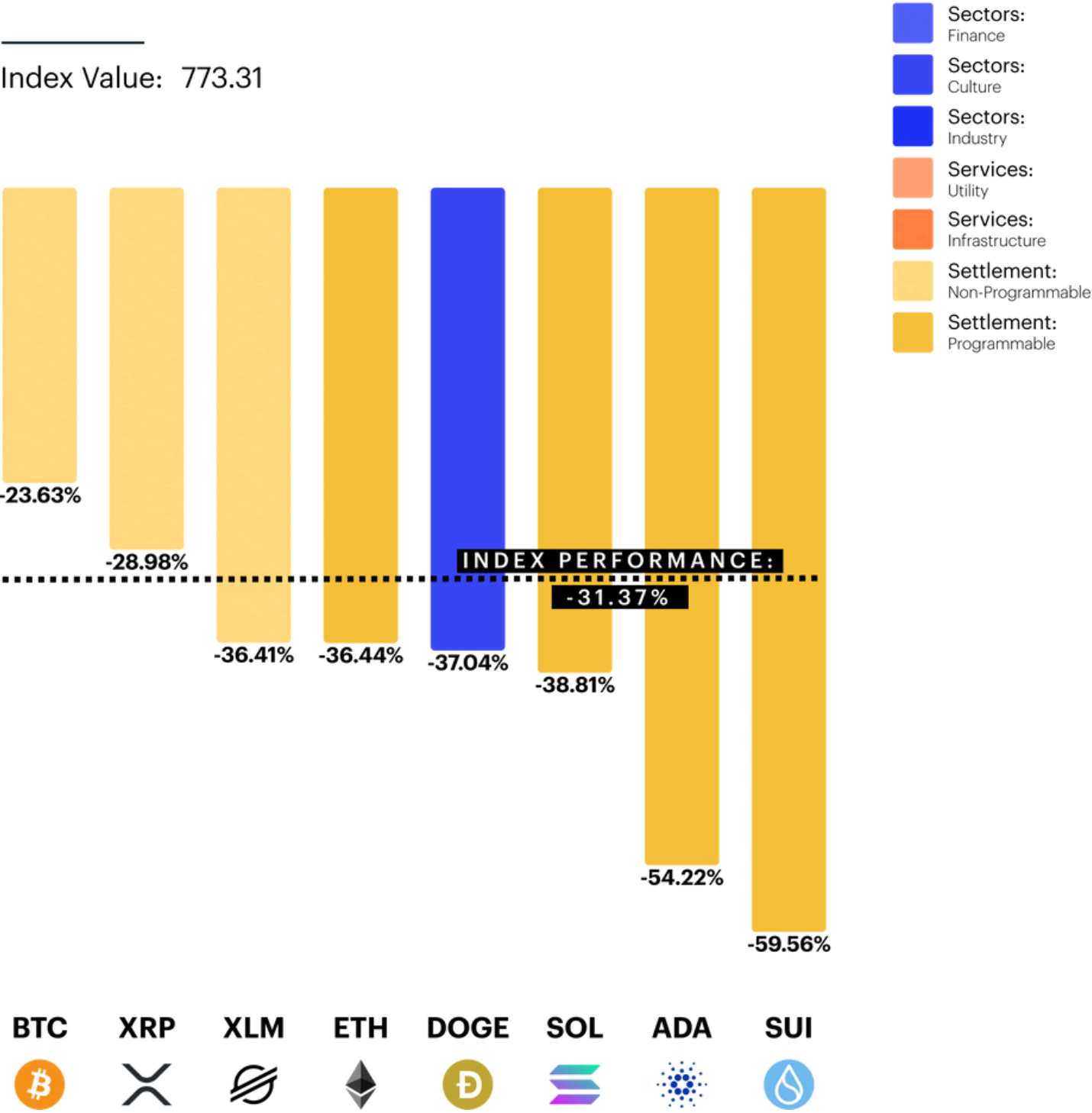


# Programmable Tokens Weigh on Large Cap in Q4



## Absolute Performance

Index Value: 773.31



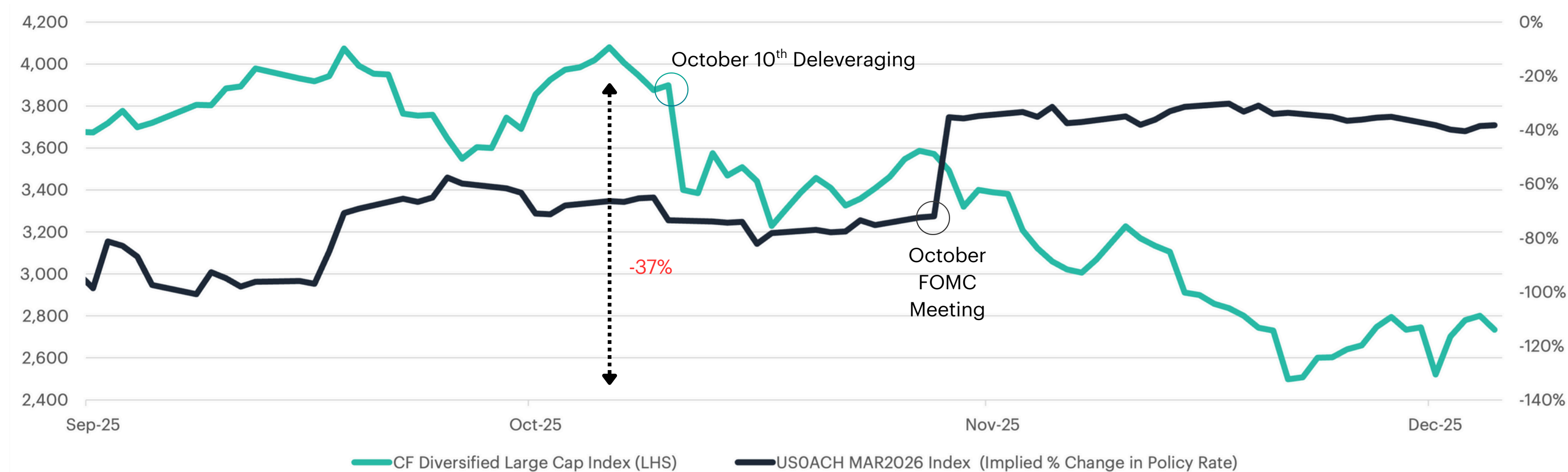
The CF Diversified Large Cap Index declined 31% over the latest rebalance period, as October's historic leverage wipeout and ETF outflows triggered a broad selloff in large-cap tokens. Bitcoin (BTC, -23.63%) was the relative leader, cushioned by its institutional role despite roughly \$3.5 billion of net ETF redemptions and a price decline from an October peak above \$126,000 to the mid-\$80,000s by late November. By contrast, smart-contract platforms absorbed heavier damage: Ethereum (ETH, -36.44%) and Solana (SOL, -38.81%) saw substantial liquidations despite ongoing ETF launches and ecosystem progress, while Cardano (ADA, -54.22%) led declines as weak DeFi activity and bearish patterns eroded confidence in higher-beta programmable assets. Payment and Store of Value names such as XRP (-28.98%) and Stellar (XLM, -36.41%) outperformed smart-contract peers but still contributed meaningfully to index losses alongside a softer meme coin segment led by Dogecoin (DOGE, -37.04%).

Sui (SUI, -59.56%) was the weakest constituent despite ongoing ecosystem development. Persistent selling was amplified by its steep vesting curve, large scheduled token unlocks and VC overhang raising concerns about expanding circulating supply, while intensifying Layer-1 competition limited the market's appetite to absorb new issuance.

Source: CF Benchmarks, as of December 1, 2025



# Fed Repricing Puts Large-Caps into Correction



The sharp repricing of rate-cut expectations following the October FOMC meeting has driven a deep deterioration in risk sentiment, pushing the CF Diversified Large Cap Index down roughly 37%, firmly within what we define as “correction” territory for crypto (a 20–45% pullback, the volatility-adjusted analogue to the 10–20% equity correction band in U.S. large caps). As futures markets steadily priced out the aggressive easing path that investors had anticipated for 2026, the policy-rate curve moved higher and the macro backdrop for long-duration assets deteriorated. This shift came on the heels of the October 10 liquidation event, when tariff uncertainty and a broad de-risking across global markets forced widespread deleveraging in crypto. The chart shows that, while implied policy rates grind steadily less dovish, large-cap digital assets transition from a volatile consolidation into a sustained downtrend. Higher expected real rates compress valuations, reduce the attractiveness of speculative growth exposures and encourage a rotation back into cash and short-duration instruments. Absent clearer evidence of disinflation any rebounds in large caps are likely to be tactical; however, with rate cuts now largely priced out, a sequence of benign data that delivers further disinflation without a growth scare could create meaningful upside alpha as markets scramble to reprice a renewed easing path.

Source: CF Benchmarks, Bloomberg as of December 5, 2025





# Attribution Analysis: CF DeFi Composite Index

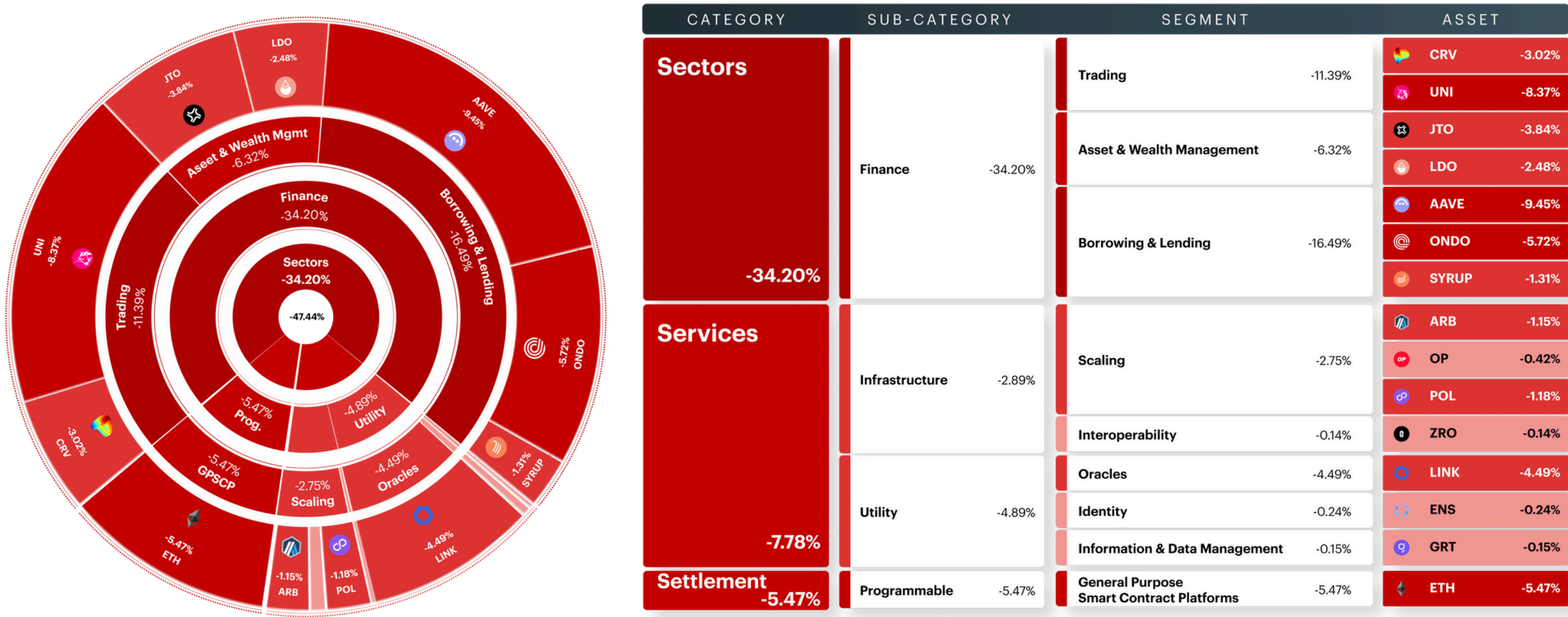


# Borrowing & Lending Drags DeFi Lower



## Index Return Contribution

Total Performance Contribution: -47.44%      Date: 1st December 2025



- Over the past three months, the CF DeFi Composite Index declined by 47.44%, with AAVE being the largest single detractor, reducing the headline index’s total return by 9.45%.
- Across segments, AAVE’s substantial weight caused the Borrowing & Lending segment to be the largest detractor from overall performance. Additionally, UNI’s significant weight made the Trading segment the second-largest detractor.

Source: CF Benchmarks, as of December 1, 2025

















# Index Weights



## 2nd September 2025

Total Weight: 100%      Index Value: 463.23

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET			
Sectors	Finance	Trading	26.00%	 CRV	6.00%	
				 UNI	20.00%	
		Asset & Wealth Management	9.71%	 JTO	4.92%	
				 LDO	4.79%	
		Borrowing & Lending	34.29%	 AAVE	20.00%	
				 ONDO	11.33%	
				 SYRUP	2.96%	
Services	Infrastructure	Scaling	4.58%	 ARB	1.86%	
				 OP	0.70%	
				 POL	2.02%	
		Interoperability	0.39%	 ZRO	0.39%	
	Oracles			9.25%	 LINK	9.25%
					Identity	0.46%
	Information & Data Management	0.32%	 GRT	0.32%		
Programmable			15.00%	General Purpose Smart Contract Platforms	15.00%	 ETH

## 1st December 2025

Total Weight: 100%      Index Value: 243.48

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors  <			

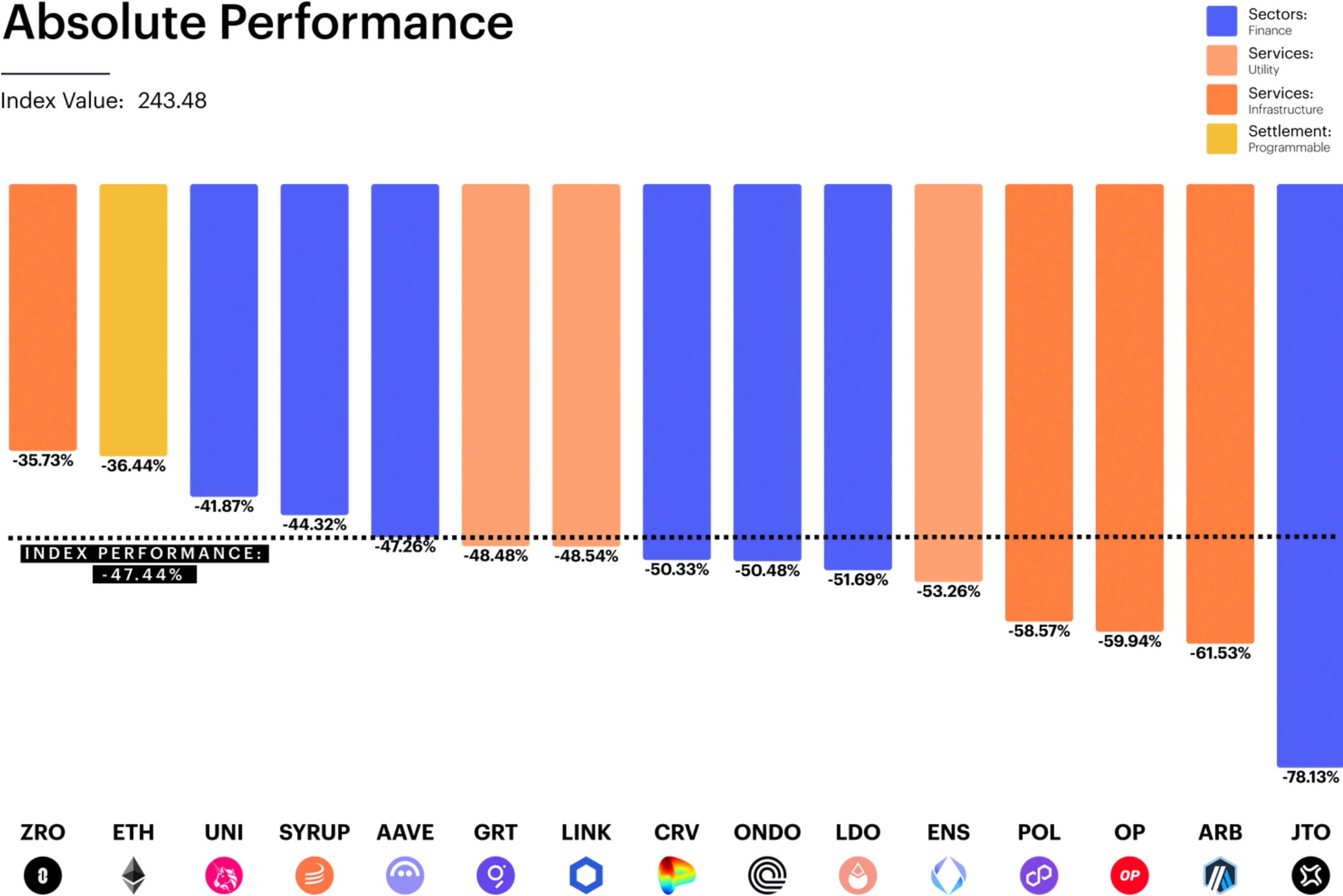


# DeFi Tokens Sold off Across the Board



## Absolute Performance

Index Value: 243.48



During the past quarter, performance inside the CF DeFi Composite Index diverged sharply, with several constituents limiting losses more effectively than others while a few faced particularly steep declines amid broader market headwinds.

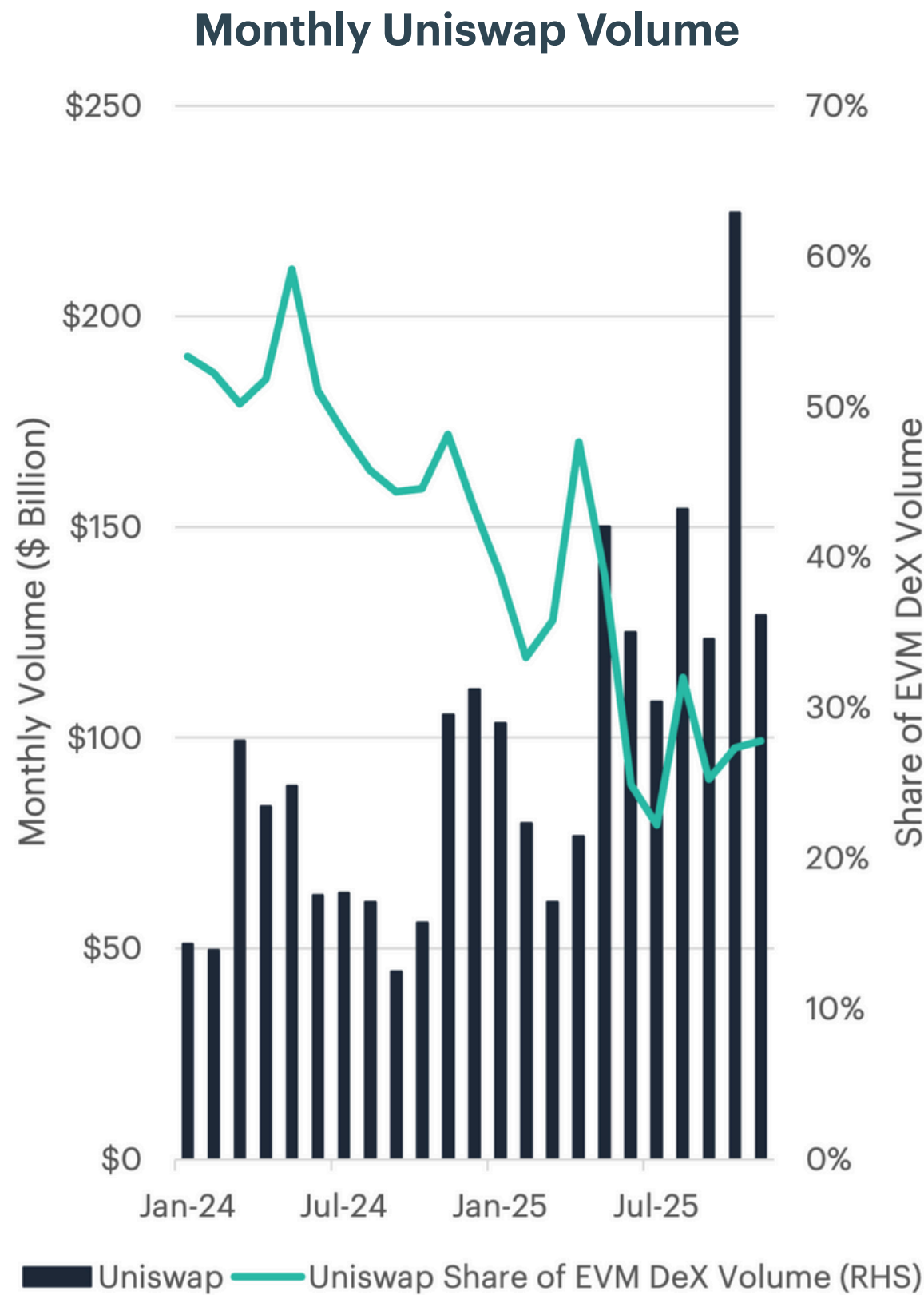
LayerZero’s ZRO token emerged as a top relative performer, declining only 35.7% during the period. This resilience stemmed from follow-up developments on the August Stargate token merger proposal, which consolidated governance and rewards to enhance cross-chain interoperability. Uniswap’s UNI token also held up relatively well, falling 41.9%. The November “UNIfication” proposal that introduced protocol fees and UNI token burns drove a sharp rally of more than 70% at its peak before the token gave back some of those gains in late November.

Jito’s JTO token was the weakest performer, plunging 78.1%. The post-September buyback fade left little momentum to counter Solana ecosystem volatility and widespread sell-offs, with on-chain activity showing notable slowdowns. Arbitrum’s ARB token also lagged severely, dropping 61.5%. U.S. government shutdown delays on SEC decisions for crypto ETFs in October stalled potential investment flows.

Source: CF Benchmarks, as of December 1, 2025



# Uniswap Rallies on UNIfication Framework



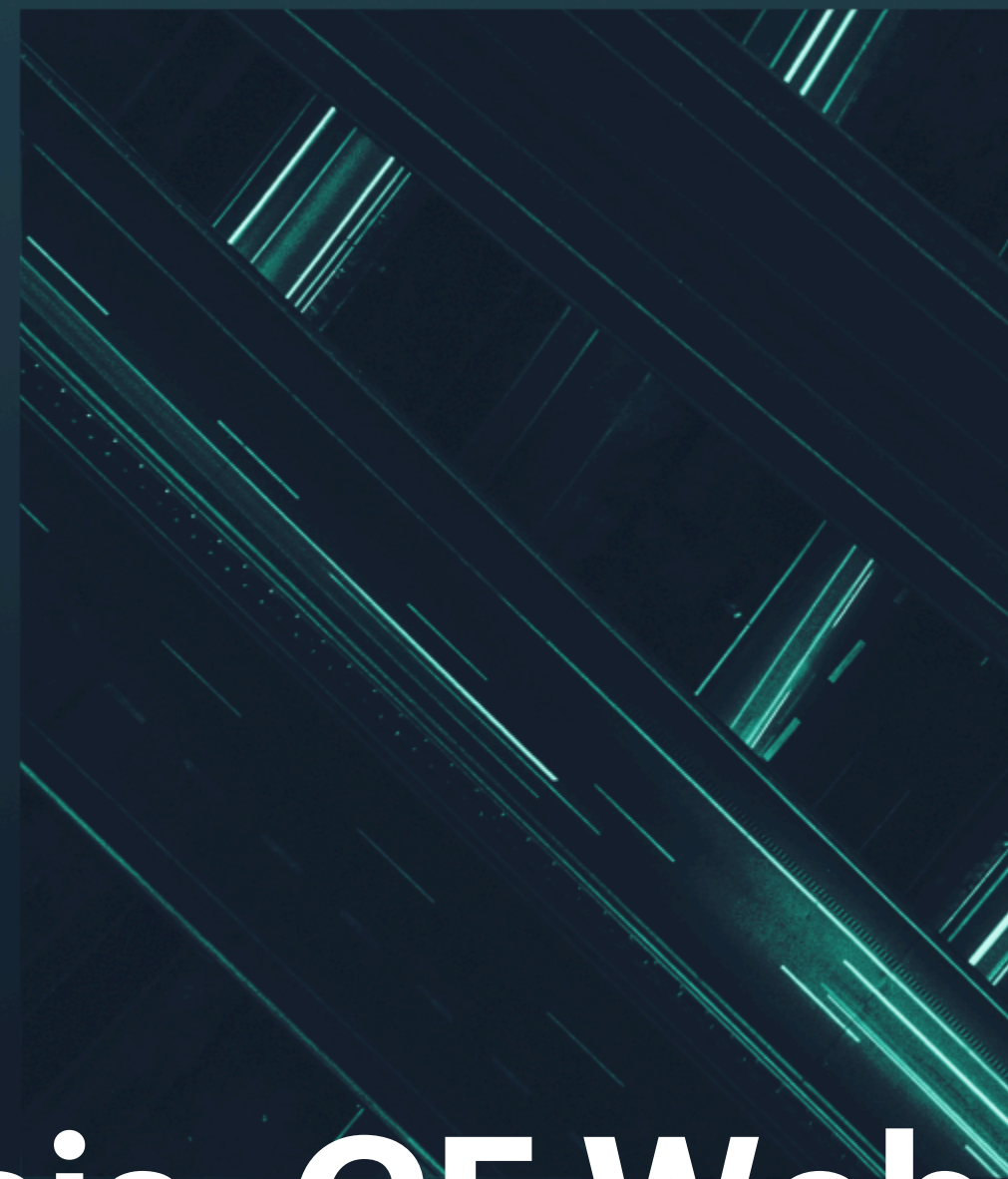
Uniswap’s recent outperformance has been driven largely by the market’s reassessment of its long-term economics following the proposal for a protocol-level fee switch. To contextualize the potential value creation for token holders, it is useful to frame both the scale of Uniswap’s underlying activity and the structural change in protocol fees. Uniswap processed an average of roughly \$73B in monthly trading volume throughout 2024. In 2025, activity accelerated materially, with year-to-date monthly volume averaging approximately \$122B, representing a ~65 percent increase. October 2025 marked a cycle high at \$225B, more than quadruple early 2024 levels. While Uniswap’s market share has fallen as DEX competition on the EVM has intensified, it still accounts for roughly 30 percent of total volume and has held relatively steady since its market share bottomed out in June 2025.

Historically, Uniswap monetization has occurred primarily through a front-end interface fee charged by Uniswap Labs on certain pairs executed through the official web application. These fees accrue solely to Labs and do not impact the protocol or token economics. Under the new UNIfication framework, Uniswap transitions away from UI-level monetization and activates protocol-level fees across v2, v3, and ultimately v4. These fees are routed on-chain into a unified mechanism that funds UNI buybacks and burns, establishing direct economic linkage between platform activity and UNI supply reduction.

To illustrate the potential impact of this monetization shift on UNI’s tokenomics, we can take the November 2025 volume of \$129B and assume a mix of 20% v2, 70% v3, and 10% v4. Under these assumptions, the proposal implies approximately \$42M in monthly protocol fees. If fully allocated to buybacks at an illustrative \$5 UNI price, the protocol could retire roughly 8.4M UNI in a single month, a level of annualized supply reduction that had not previously been reflected in market valuations.

Following the announcement, UNI experienced a sharp 42 percent price appreciation, rallying from the \$7 range to around \$10 on significantly elevated trading volumes. The speed and magnitude of the move reflect a broad repricing of UNI’s fundamental value as investors incorporated a sustainable, volume-linked revenue stream into the token’s valuation framework.





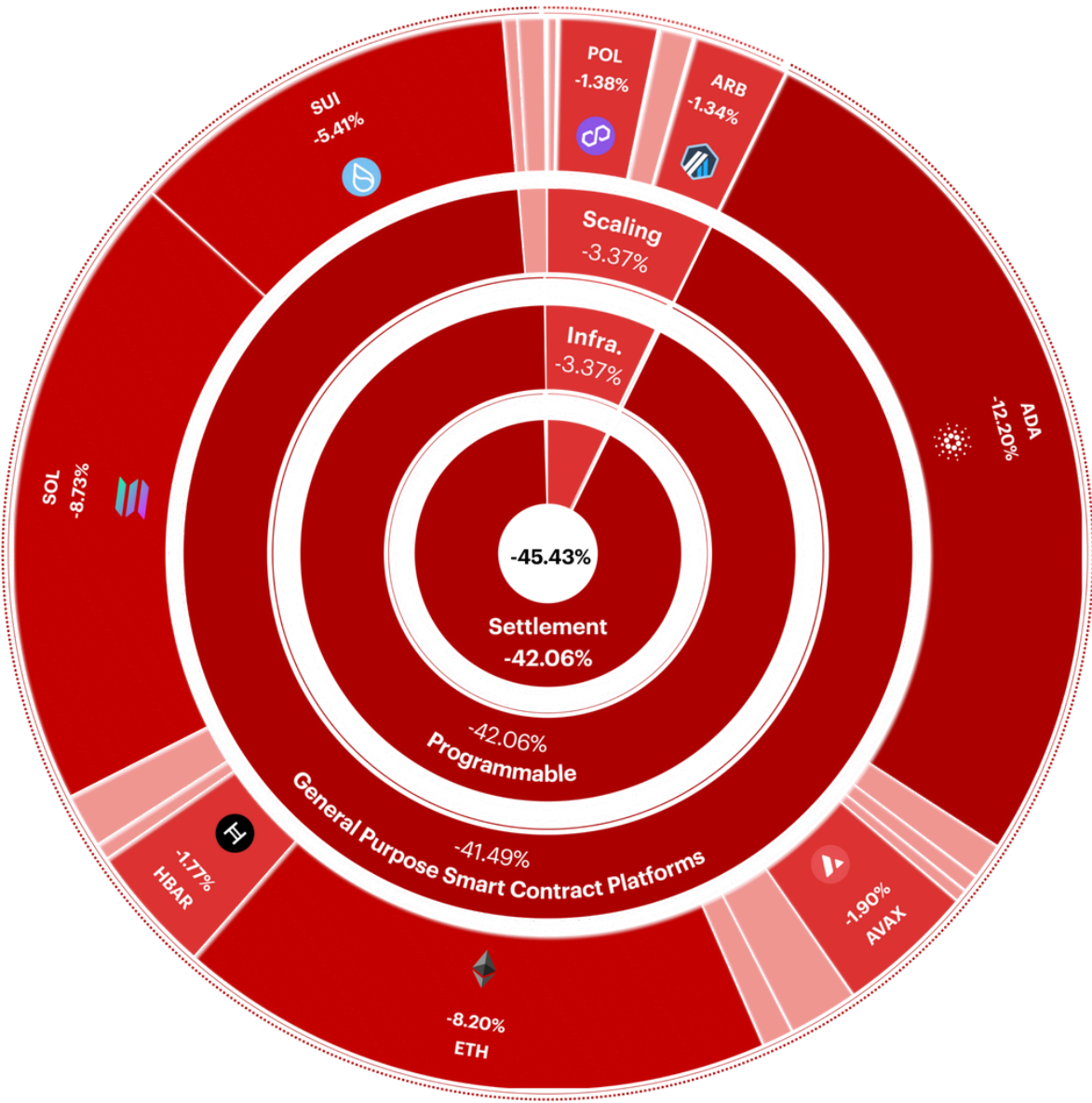
# Attribution Analysis: CF Web 3.0 Smart Contract Platforms Index



# ADA Leads Smart Contract Platforms Lower in Q4



## Index Return Contribution



Total Performance Contribution: -45.43%      Date: 1st December 2025

CATEGORY	SUB-CATEGORY	SEGMENT
Services	Infrastructure	Scaling
Settlement	Programmable	General Purpose Smart Contract Platforms
Settlement	Programmable	Specialized Purpose Smart Contract Platforms

ARB	-1.34%
OP	-0.49%
POL	-1.38%
TIA	-0.16%
ADA	-12.20%
ALGO	-0.50%
APT	-0.24%
ATOM	-0.17%
AVAX	-1.90%
DOT	-0.96%
ETC	-0.43%
ETH	-8.20%
HBAR	-1.77%
ICP	-0.23%
NEAR	-0.74%
SOL	-8.73%
SUI	-5.41%
INJ	-0.19%
SEI	-0.37%

- The CF Web 3.0 Smart Contract Platforms Index fell 45.43% in Q4. ADA was the largest detractor from overall index performance, contributing 12.2% of the decline.
- Weakness across general-purpose smart contract platforms drove the index lower by 41.91%. Scaling tokens ARB and TIA were the poorest performers during the quarter, declining 61.5% and 64.9%, respectively.

Source: CF Benchmarks, as of December 1, 2025



# Index Weights



## 2nd September 2025

Total Weight: 100%      Index Value: 501.01

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Services  5.59%	Infrastructure 5.59%	Scaling 5.59%	ARB 2.18%
			OP 0.82%
			POL 2.36%
			TIA 0.25%
Settlement  94.41%	Programmable 94.41%	General Purpose Smart Contract Platforms 93.43%	ADA 22.50%
			ALGO 1.13%
			APT 0.42%
			ATOM 0.34%
			AVAX 4.03%
			DOT 2.03%
			ETC 1.13%
			ETH 22.50%
			HBAR 4.55%
			ICP 0.96%
			NEAR 2.26%
			SOL 22.50%
			SUI 9.08%
			INJ 0.32%
			SEI 0.65%
		Specialized Purpose Smart Contract Platforms 0.97%	

## 1st December 2025

Total Weight: 100%      Index Value: 273.43

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Services  4.48%	Infrastructure 4.48%	Scaling 4.48%	ARB 1.67%
			OP 0.67%
			POL 1.94%
			TIA 0.20%
Settlement  95.52%	Programmable 95.52%	General Purpose Smart Contract Platforms 94.76%	ADA 22.23%
			ALGO 1.17%
			APT 0.40%
			ATOM 0.39%
			AVAX 4.38%
			DOT 1.81%
			ETC 1.28%
			ETH 22.50%
			HBAR 6.33%
			ICP 1.67%
			NEAR 2.94%
			SOL 22.50%
			SUI 7.16%
			INJ 0.21%
			SEI 0.55%
		Specialized Purpose Smart Contract Platforms 0.76%	

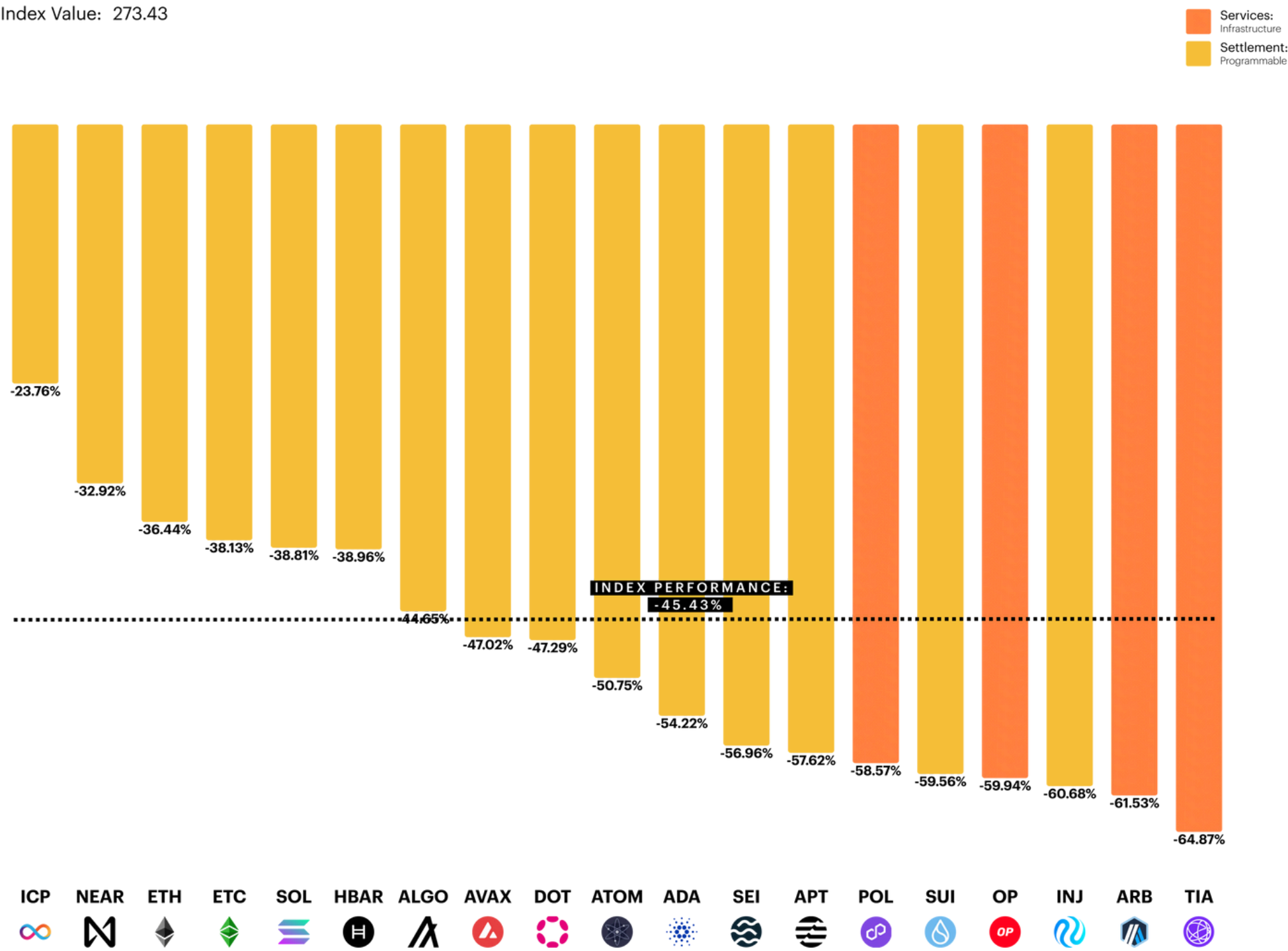


# Infrastructure Underperforms in Smart Contract Rout



## Absolute Performance

Index Value: 273.43



Smart contract platforms saw broadly negative performance over the period, with only a few constituents demonstrating relative resilience amid widespread risk-off sentiment. Investors favored networks showing tangible on-chain traction, rising developer activity, or improving value-capture dynamics, while projects facing supply overhangs, limited near-term utility, or delayed ecosystem adoption underperformed sharply.

Internet Computer (ICP) was a relative outperformer, declining materially less than peers as momentum strengthened around its cross-chain “Chain Fusion” capabilities and expanding developer base. TVL growth, increased smart-contract activity, and advancing interoperability upgrades helped support fundamentals despite broader market weakness.

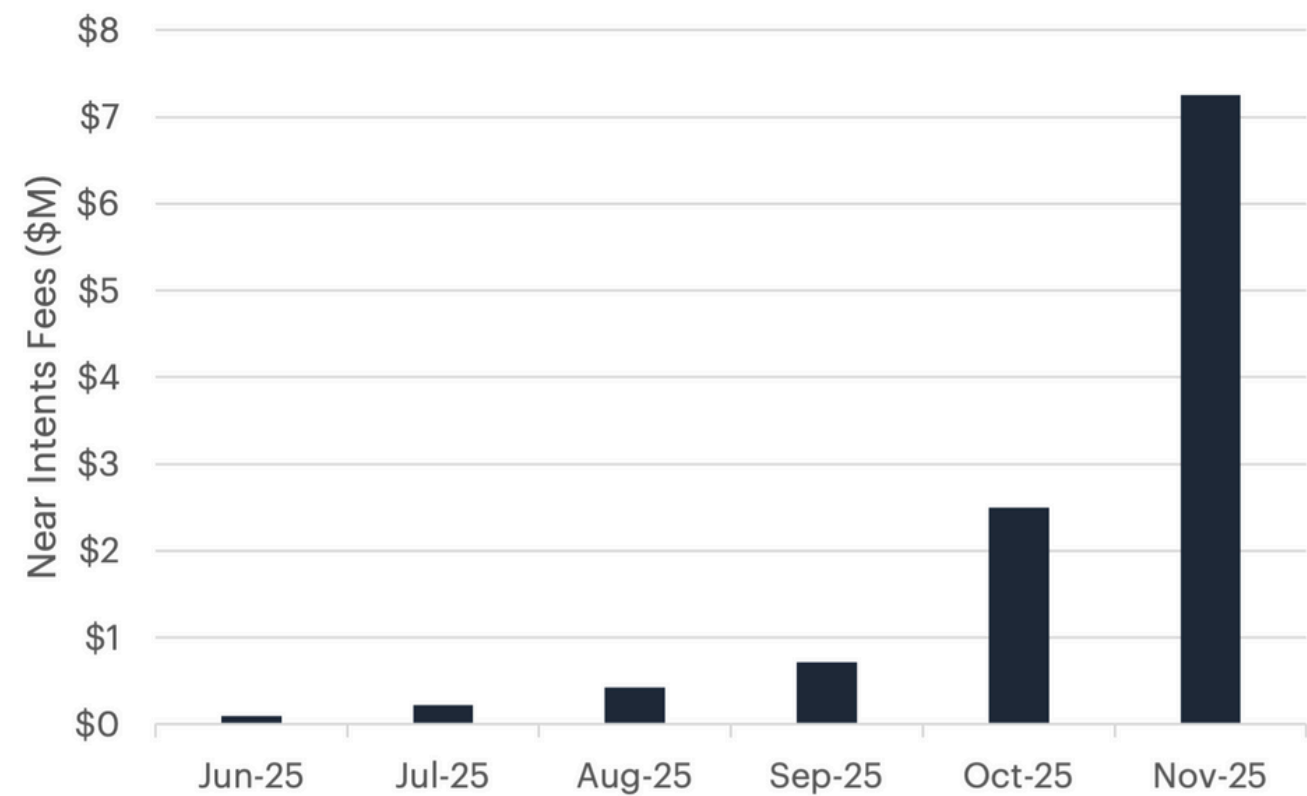
Celestia (TIA) was the worst performer, falling steeply as speculative interest faded and adoption lagged expectations. Despite completing its largest-ever upgrade which expanded data throughput and reduced inflation, weak active usage and a maturing post-airdrop supply profile left demand insufficient to offset persistent selling pressure and concerns around near-term ecosystem utility.



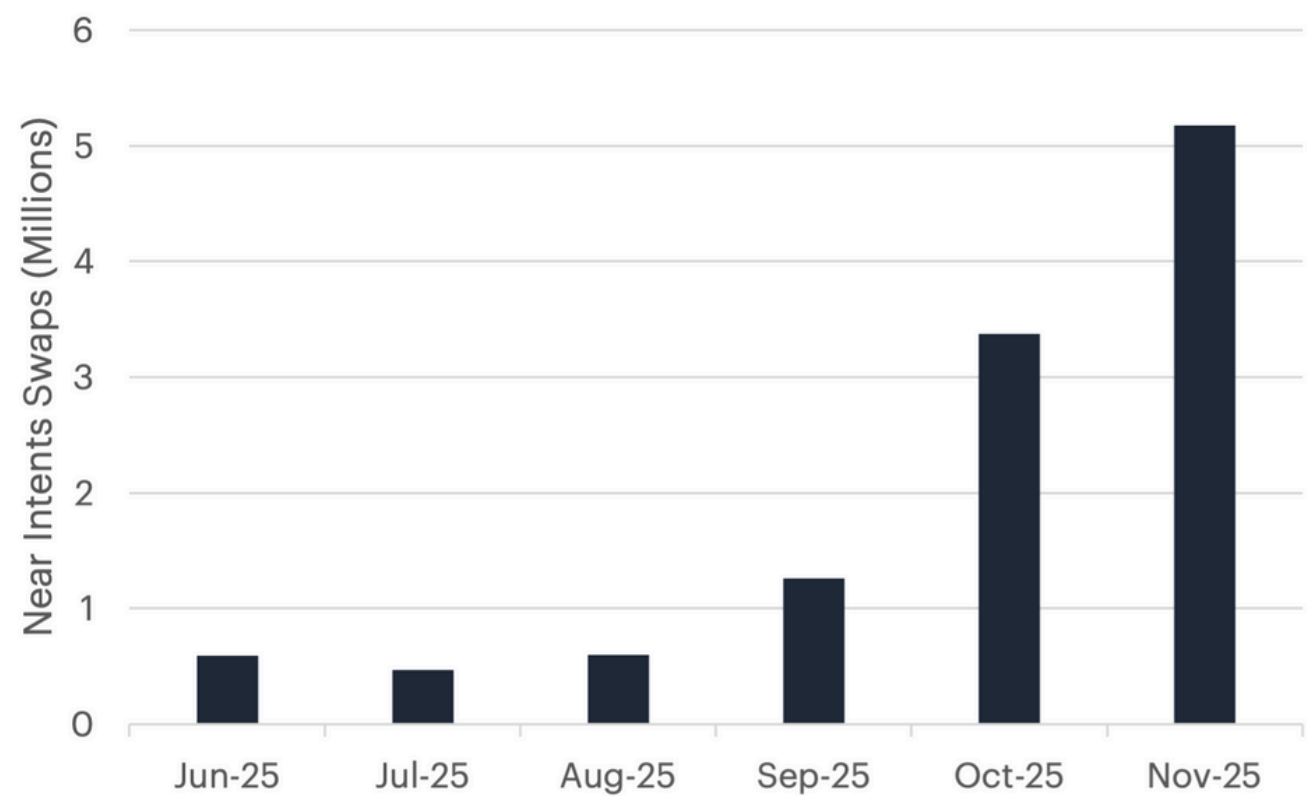
# Cross-Chain Swaps Boost NEAR Adoption



NEAR Intents Fees by Month



NEAR Cross-Chain Swaps by Month



NEAR Intents is NEAR’s intent-based transaction routing layer, allowing users to specify the outcome they want (e.g., “swap asset X on chain A for asset Y on chain B”) while solvers compete to execute the optimal cross-chain path under the hood. This abstracts away bridging and multi-step execution, making cross-chain swaps faster, cheaper, and more reliable for users and applications that need to move liquidity seamlessly across ecosystems.

Intents generate fees every time a solver fulfills an order, increasing transaction volume and gas paid on NEAR. These fees support validator revenue and staking yields, strengthening NEAR’s position as a multichain coordination layer. Growth in this segment has been striking in 2025. Fees rose from roughly \$0.1 million in June to \$0.7 million in September before inflecting sharply to \$2.5 million in October and \$7.3 million in November. Over the same period, monthly active users interacting with Intents expanded from around 0.6 million in June to 1.3 million in September, then accelerated to 3.4 million in October and 5.2 million in November. This step-change in usage and fee generation likely contributed to NEAR paring its decline at the end of the quarter, as Intents emerges as a meaningful, revenue-generating driver of NEAR’s on-chain economy.

Source: CF Benchmarks, Dune Analytics, as of December 3, 2025





# Attribution Analysis: CF Digital Culture Composite Index

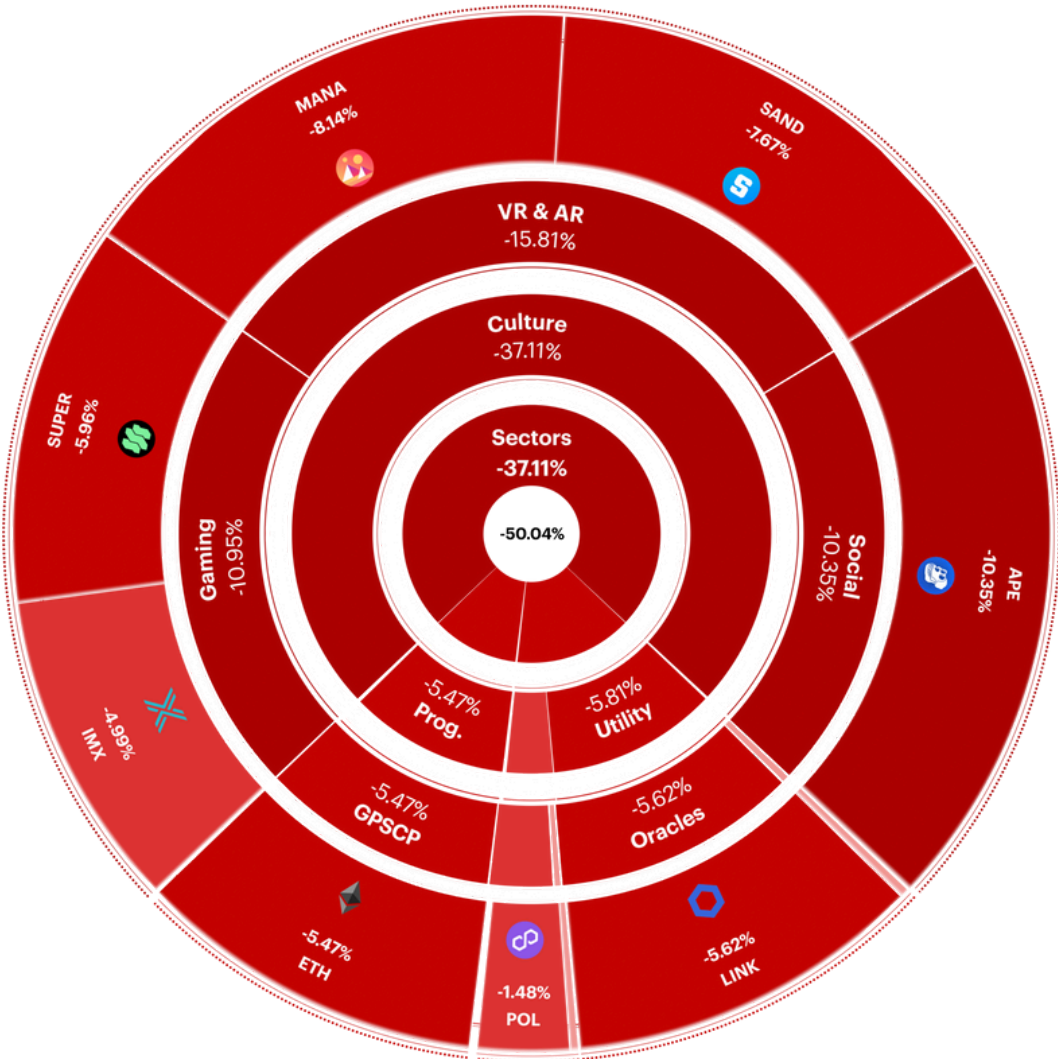











# VR & AR Tokens Lead Culture Lower



## Index Return Contribution

Total Performance Contribution: -50.04%      Date: 1st December 2025



Category	Sub-Category	Segment	Asset
Sectors	Culture	Gaming	 IMX -4.99%
			 SUPER -5.96%
		VR & AR	 MANA -8.14%
			 SAND -7.67%
		Social	 APE -10.35%
Services	Infrastructure	Scaling	 POL -1.48%
		Interoperability	 ZRO -0.18%
	Utility	Oracles	 LINK -5.62%
		Information & Data Management	 GRT -0.19%
	Settlement	Programmable	General Purpose Smart Contract Platforms

- The CF Digital Culture Composite Index fell 50.04% in Q4. SUPER experienced the steepest decline at 60.14%, and with its 9.91% starting weight, it contributed a 5.96% drag on the index.
- The VR & AR segment was the largest detractor from overall performance, accounting for a 15.81% decrease in the headline index. Both tokens in the segment, SAND and MANA, declined by roughly 50% during the rebalance period.



# Index Weights



## 2nd September 2025

Total Weight: 100%      Index Value: 238.24

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Culture	Gaming	IMX 10.73%
			SUPER 9.91%
		VR & AR	MANA 16.06%
			SAND 15.58%
		Social	APE 17.72%
Services	Infrastructure	Scaling	POL 2.53%
		Interoperability	ZRO 0.49%
	Utility	Oracles	LINK 11.58%
		Information & Data Management	GRT 0.40%
Settlement	Programmable	General Purpose Smart Contract Platforms	ETH 15.00%

## 1st December 2025

Total Weight: 100%      Index Value: 119.02

CATEGORY	SUB-CATEGORY	SEGMENT	ASSET
Sectors	Culture	Gaming	IMX 9.63%
			SUPER 5.19%
		VR & AR	MANA 12.07%
			SAND 11.76%
		Social	APE 11.36%
			PUMP 20.00%
Services	Infrastructure	Scaling	ARB 1.60%
		Interoperability	POL 1.86%
	Utility	Oracles	ZRO 0.61%
		Information & Data Management	LINK 10.57%
			GRT 0.35%
Settlement	Programmable	General Purpose Smart Contract Platforms	ETH 11.93%
			SOL 3.07%

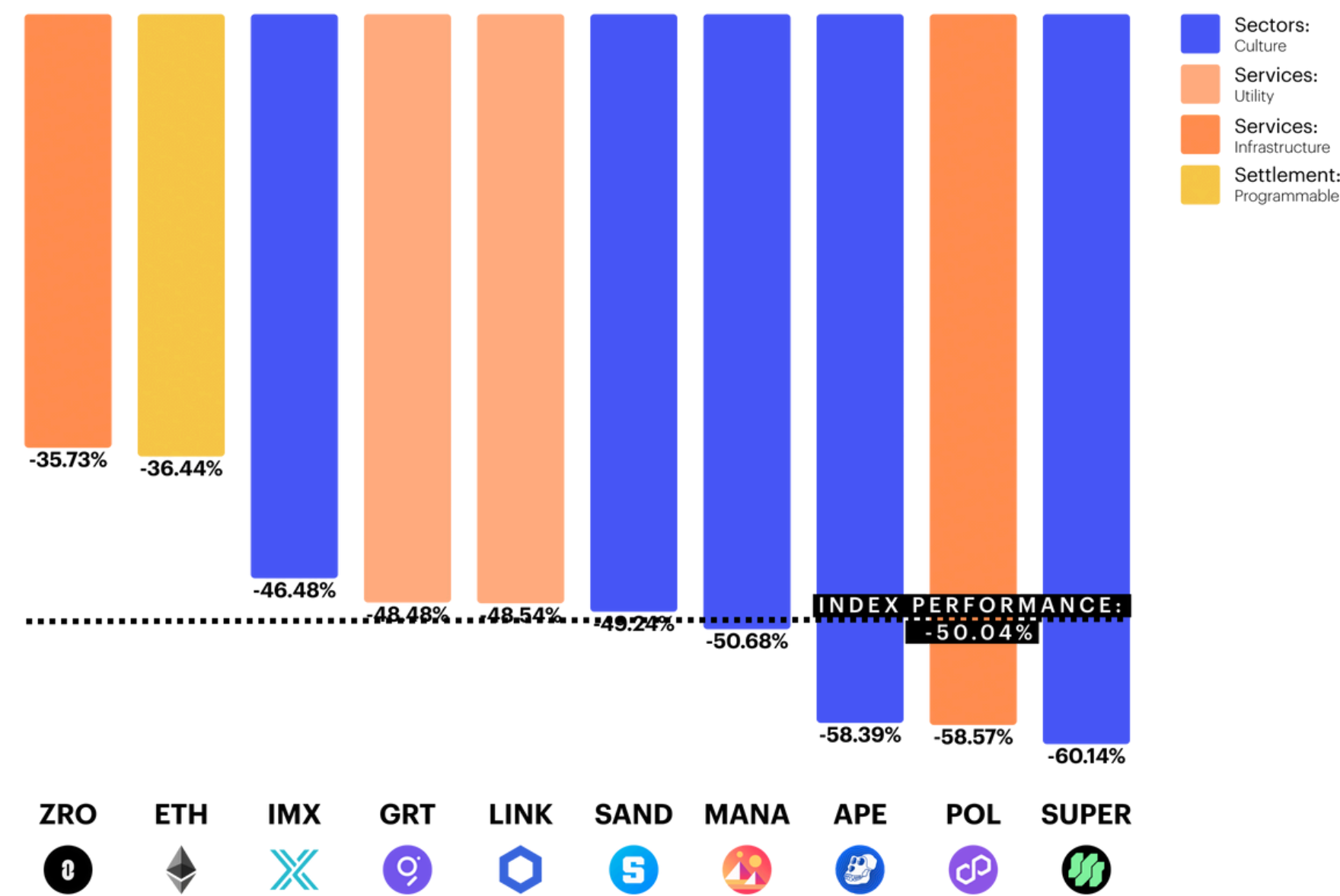


# Culture Tokens Decline Sharply in Q4



## Absolute Performance

Index Value: 119.02



Culture-related tokens delivered broadly negative performance over the rebalance period, with only a select few demonstrating relative resilience. Assets tied to strong cross-chain infrastructure and growing ecosystem usage held up best, while tokens facing dilution, branding transitions, or weak end-market demand lagged. Broader risk-off sentiment across altcoins amplified these divergences.

LayerZero (ZRO) was a relative standout, declining materially less than peers as adoption of its omnichain messaging protocol continued to accelerate. High-profile integrations, most notably PayPal’s PYUSD moving cross-chain via LayerZero and Tether deploying omnichain USDT. Although recurring token unlocks created supply pressure, network usage growth and expanding stablecoin integrations helped cushion the drawdown. Immutable (IMX) was another leader, supported by clear fundamental progress within Web3 gaming. The launch of Ubisoft’s Might & Magic on Immutable, a new cross-chain gaming hub with Polygon, and the completion of IMX’s token-vesting schedule all contributed to improving sentiment.

At the opposite end, SuperVerse (SUPER) was among the weakest performers, with ongoing NFT-market softness and limited organic demand overwhelming short-lived rallies tied to airdrop campaigns. Polygon’s POL also underperformed sharply as the competitive pressure intensified across Layer-2s.

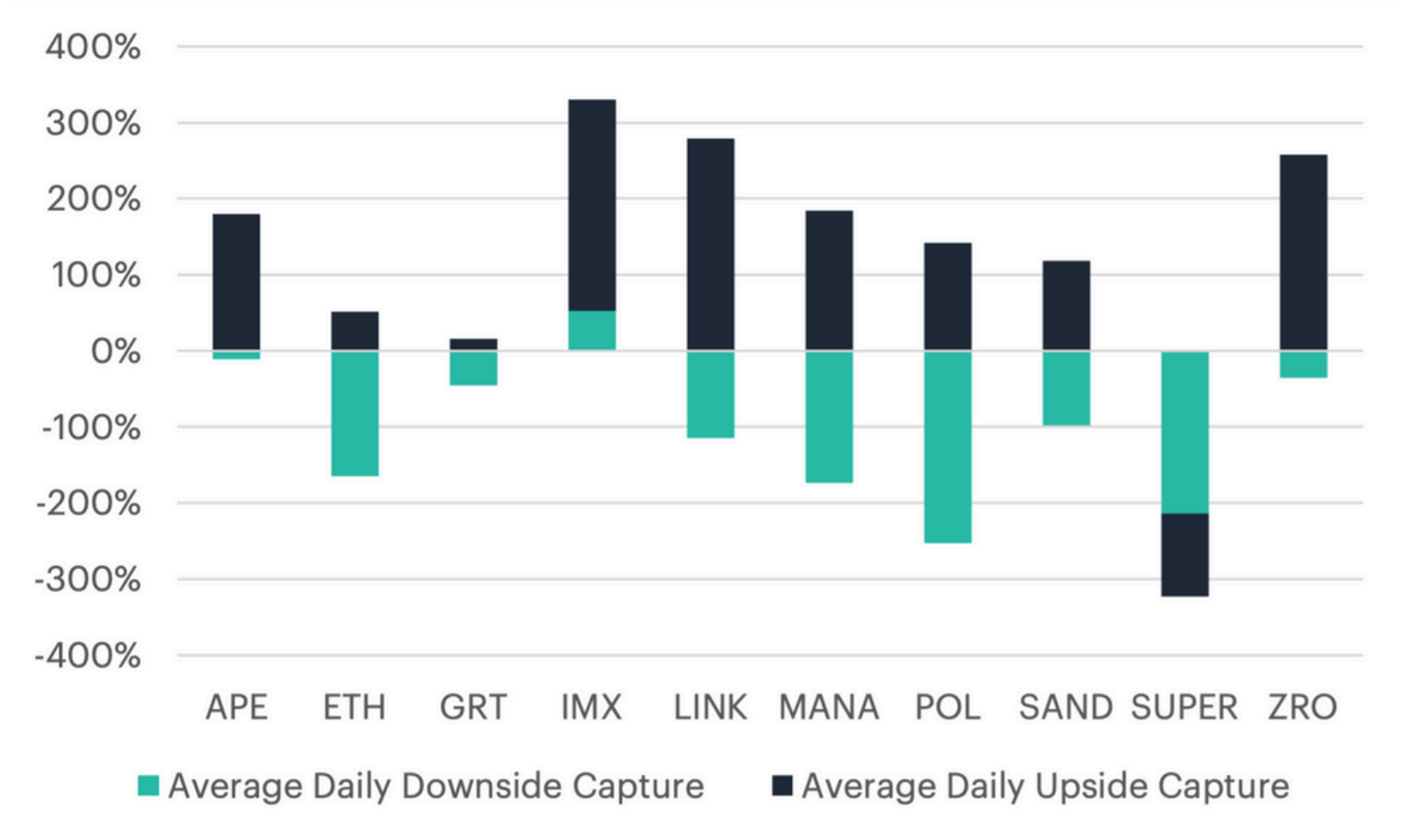
Source: CF Benchmarks, as of December 1, 2025



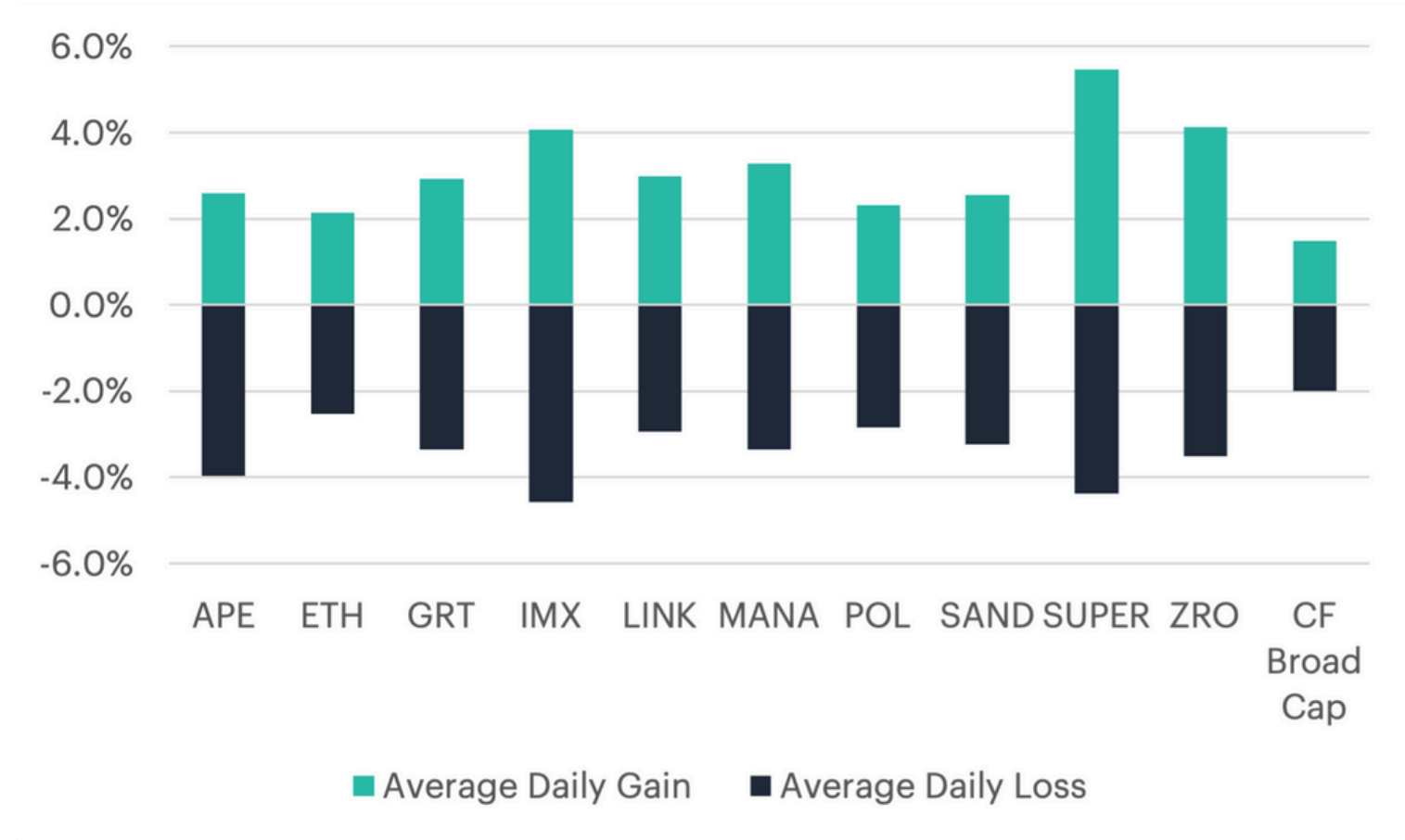
# Volatility Drag Undercuts Culture Token Rallies



Q4 2025 Upside and Downside Capture



Q4 2025 Average Daily Price Movements



Performance across digital culture tokens during the period highlights the asymmetric impact of volatility in a market downturn. Upside and downside capture ratios suggest several assets outperformed on positive market days, with many showing upside capture above 100 percent, but these metrics are misleading on their own. High upside capture reflects strong sensitivity to rising markets, yet it does not account for how often or how sharply markets fell. Over the period, the market declined 27.8 percent while the Digital Culture Index fell 50.04 percent, illustrating how persistent negative sessions dominated results.

Average daily returns reinforce this dynamic. Tokens posted higher gains than the market on up days, but losses on down days were far larger, creating significant volatility drag. Assets such as MANA, POL, and SUPER showed extreme downside capture, allowing a small number of deep declines to overwhelm sporadic rallies. In this environment, conditional outperformance on up days could not offset the cumulative effect of repeated, outsized losses.





# Appendix



# Market Performance Overview



## Major Crypto-Pairs (USD)

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatility
Bitcoin	-8.0%	-1.5%	-23.0%	-23.6%	-10.8%	41.63
Ethereum	-9.8%	-2.2%	-28.3%	-36.4%	-18.8%	60.33
Cardano	-12.6%	-8.3%	-38.8%	-54.2%	-56.7%	73.06
Dogecoin	-10.4%	-8.4%	-28.4%	-37.1%	-59.0%	78.71
Polygon	-13.0%	-9.8%	-36.2%	-58.5%	-74.5%	73.24
Solana	-12.3%	-4.9%	-33.9%	-38.8%	-36.8%	73.60
Litecoin	-12.0%	-9.4%	-20.7%	-31.9%	-26.9%	90.21
Chainlink	-10.7%	-4.6%	-30.9%	-48.5%	-42.6%	85.34
Polkadot	-14.8%	-12.7%	-31.2%	-47.3%	-70.8%	84.34
Avalanche	-15.8%	-5.1%	-30.7%	-47.0%	-65.3%	87.46
Uniswap	-11.7%	-9.8%	-3.2%	-41.9%	-59.4%	101.78
Algorand	-11.7%	-8.8%	-27.4%	-44.7%	-62.9%	68.95
Stellar Lumens	-11.2%	-5.4%	-25.3%	-36.4%	-31.7%	67.94
Cosmos	-12.5%	-9.6%	-27.4%	-50.8%	-66.1%	72.11
Aave	-8.0%	-3.0%	-25.8%	-47.3%	-48.3%	76.32
Atom	-6.0%	-9.8%	-23.7%	-48.9%	-63.2%	71.15
Compound	9.5%	21.2%	-1.0%	-17.9%	-53.5%	68.44
Ripple	-8.4%	-11.0%	-20.2%	-28.5%	-4.0%	65.24
Curve	-7.3%	-13.6%	-49.0%	-25.0%	-73.2%	168.82

## Fixed Income

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatility
Bloomberg Global-Aggregate Bond Index	-0.2%	0.3%	0.0%	7.7%	7.7%	3.92
Bloomberg Global Agg Credit Index	-0.3%	0.3%	0.2%	9.8%	9.8%	3.86
Bloomberg Global High Yield Index	-0.1%	0.5%	0.5%	10.9%	10.9%	2.92
Bloomberg US Long Treasury Bond Index	-1.1%	-0.9%	-0.7%	6.2%	6.2%	8.55
Bloomberg US Short Term Treasury Index	0.0%	0.1%	0.3%	4.0%	4.0%	0.38
Bloomberg Global Inflation-Linked Index	-0.3%	-0.2%	-0.2%	7.1%	7.1%	3.20

## Equities

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatility
S&P 500 INDEX	-0.5%	1.6%	-0.3%	17.2%	17.2%	12.12
Nasdaq-100 Index	-0.4%	1.9%	-1.9%	21.4%	21.4%	16.70
FTSE 100 Index	-0.2%	1.8%	0.2%	22.7%	22.7%	8.36
MSCI Europe Index	-0.2%	2.2%	0.7%	16.8%	16.8%	10.25
MSCI Japan Index	-1.3%	1.1%	-0.7%	21.9%	21.9%	16.87
MSCI Emerging Markets Index	0.1%	2.0%	-2.3%	30.5%	30.5%	13.70
MSCI World Index	-0.4%	1.9%	-0.1%	20.1%	20.1%	10.59
MSCI ACWI Index	-0.4%	1.9%	-0.4%	21.1%	21.1%	9.96

## Commodities

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatility
Bloomberg Commodity Index	0.6%	3.3%	3.5%	12.5%	12.5%	11.75
Bloomberg Energy Subindex	1.4%	2.4%	3.5%	-3.9%	-3.9%	22.05
Bloomberg Industrial Metals Subindex	0.9%	3.6%	1.0%	10.7%	10.7%	22.68
Bloomberg Precious Metals Subindex	1.3%	6.7%	9.9%	62.4%	62.4%	24.36
Bloomberg WTI Crude Oil Subindex	1.3%	0.8%	-2.1%	-9.0%	-9.0%	25.21
Bloomberg Gold Subindex	0.5%	3.6%	6.4%	59.5%	59.5%	21.67

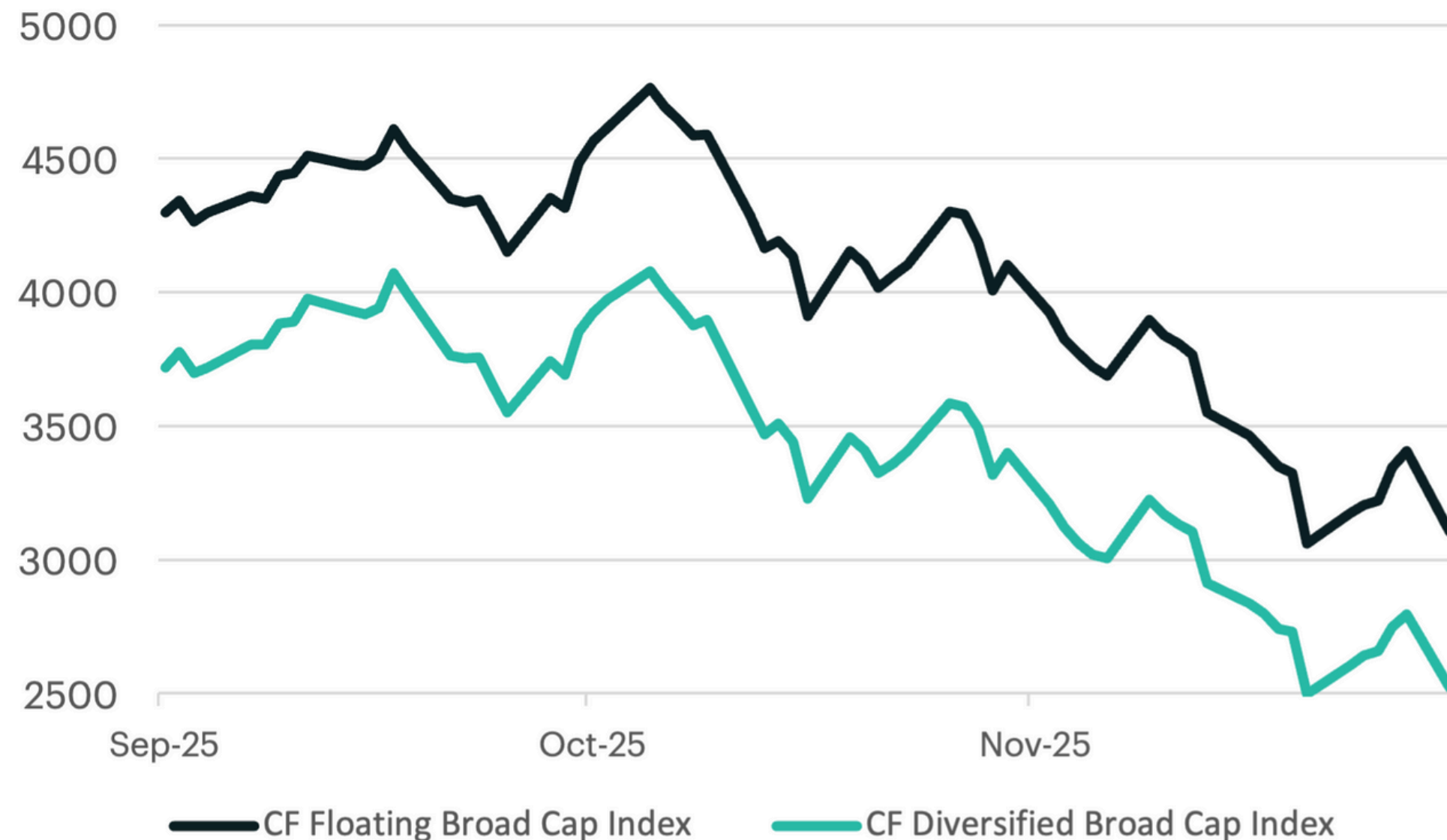
## Fiat Currency Pairs

Name	1 Day	1 Week	1 Month	3 Month	YTD	90 D Volatility
DOLLAR INDEX SPOT	0.0%	-0.7%	-0.4%	1.7%	-8.4%	5.74
EURO/US DOLLAR	0.1%	0.8%	0.6%	-1.1%	12.1%	6.15
BRITISH POUND/US DOLLAR	-0.2%	0.8%	0.5%	-1.7%	5.6%	6.32
JAPANESE YEN/US DOLLAR	0.5%	0.9%	-0.9%	-4.9%	1.1%	8.80
US DOLLAR/SWISS FRANC	0.1%	-0.5%	0.0%	1.0%	-11.3%	6.64
AUSTRALIAN DOLLAR/US DOLLAR	-0.1%	1.2%	0.0%	-1.0%	5.8%	6.72
MEXICAN PESO/US DOLLAR	-0.1%	1.1%	1.3%	0.0%	13.8%	6.11
BRAZIL REAL/US DOLLAR	-0.4%	0.6%	0.4%	-0.6%	15.2%	9.45
US DOLLAR/SINGAPORE DOLLAR	0.0%	-0.7%	-0.3%	0.5%	-5.1%	3.49
TAIWAN DOLLAR/US DOLLAR	-0.1%	0.1%	-2.2%	-3.1%	4.3%	4.30

Source: CF Benchmarks, Bloomberg, as of December 1, 2025



# The CF Diversified Broad Cap Indices



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.

Source: CF Benchmarks, Bloomberg, as of December 1, 2025



# Constituent changes: CF Broad Cap Indices



## Additions (+)

- World Liberty Financial (WLFI): WLFI is a governance token for World Liberty Financial, a DeFi project backed by Donald Trump and family, aiming to strengthen the role of the U.S. dollar in decentralized finance.
- Ethena (ENA): Ethena (ENA) is a synthetic dollar protocol that aims to establish a stablecoin-like asset (USDe) through a delta-neutral hedging strategy.
- Worldcoin (WLD): Worldcoin (WLD) is a decentralized identity and financial network designed to provide global economic access.
- Pump.fun (PUMP): PUMP token is the native cryptocurrency of Pump.fun, a platform built on the Solana blockchain that simplifies launching and trading new memecoins.
- Pudgy Penguins (PENGU): Pudgy Penguins is an Ethereum-based NFT project featuring unique, collectible penguin characters.
- VeChain (VET): VeChain is a blockchain platform designed for supply chain management and business processes.

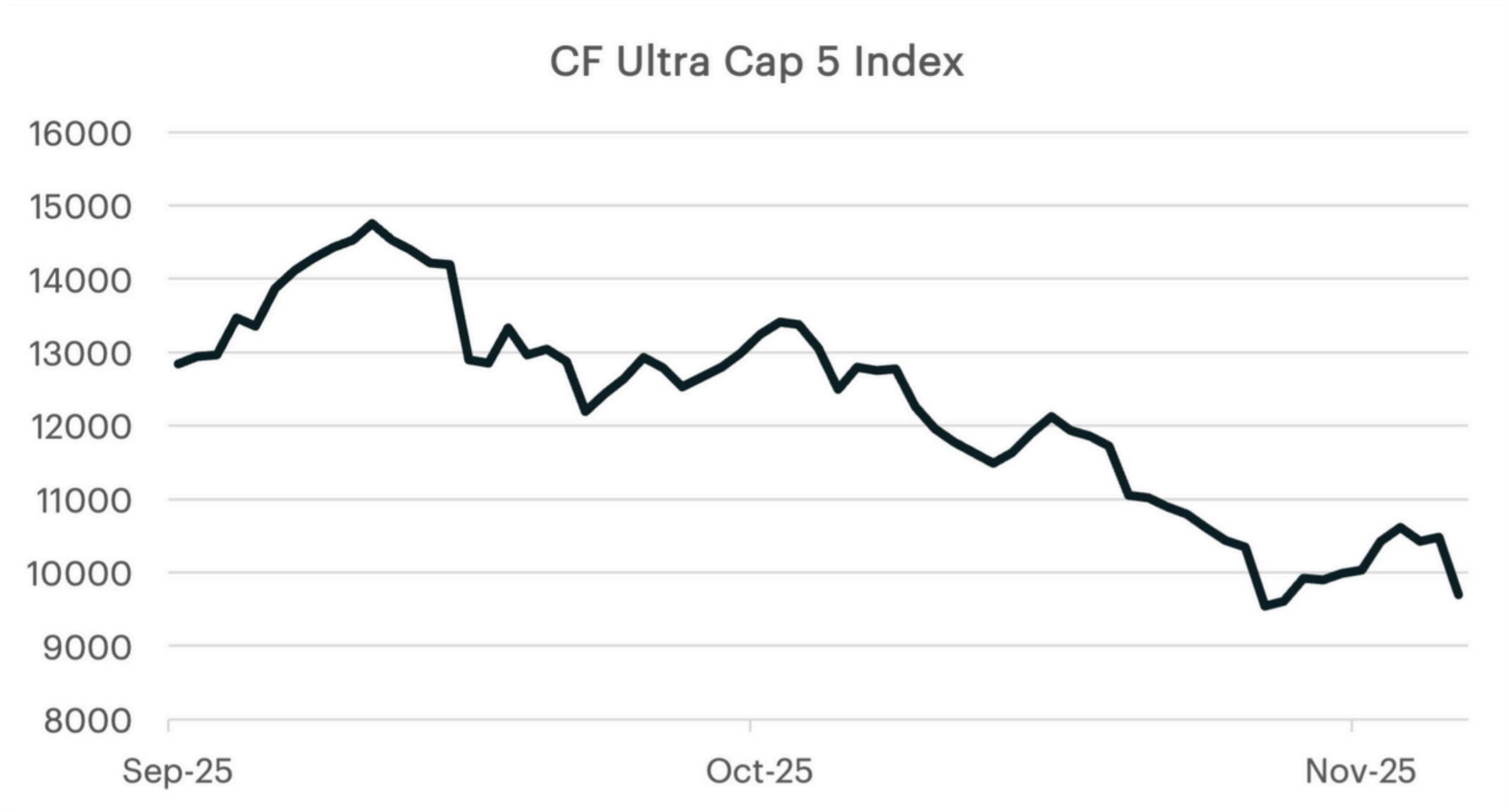
## Subtractions (-)

- None

Source: CF Benchmarks LTD., Kraken.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 December 1, 2025



# Constituent changes: CF Ultra Cap 5 Index



## Additions (+)

- None

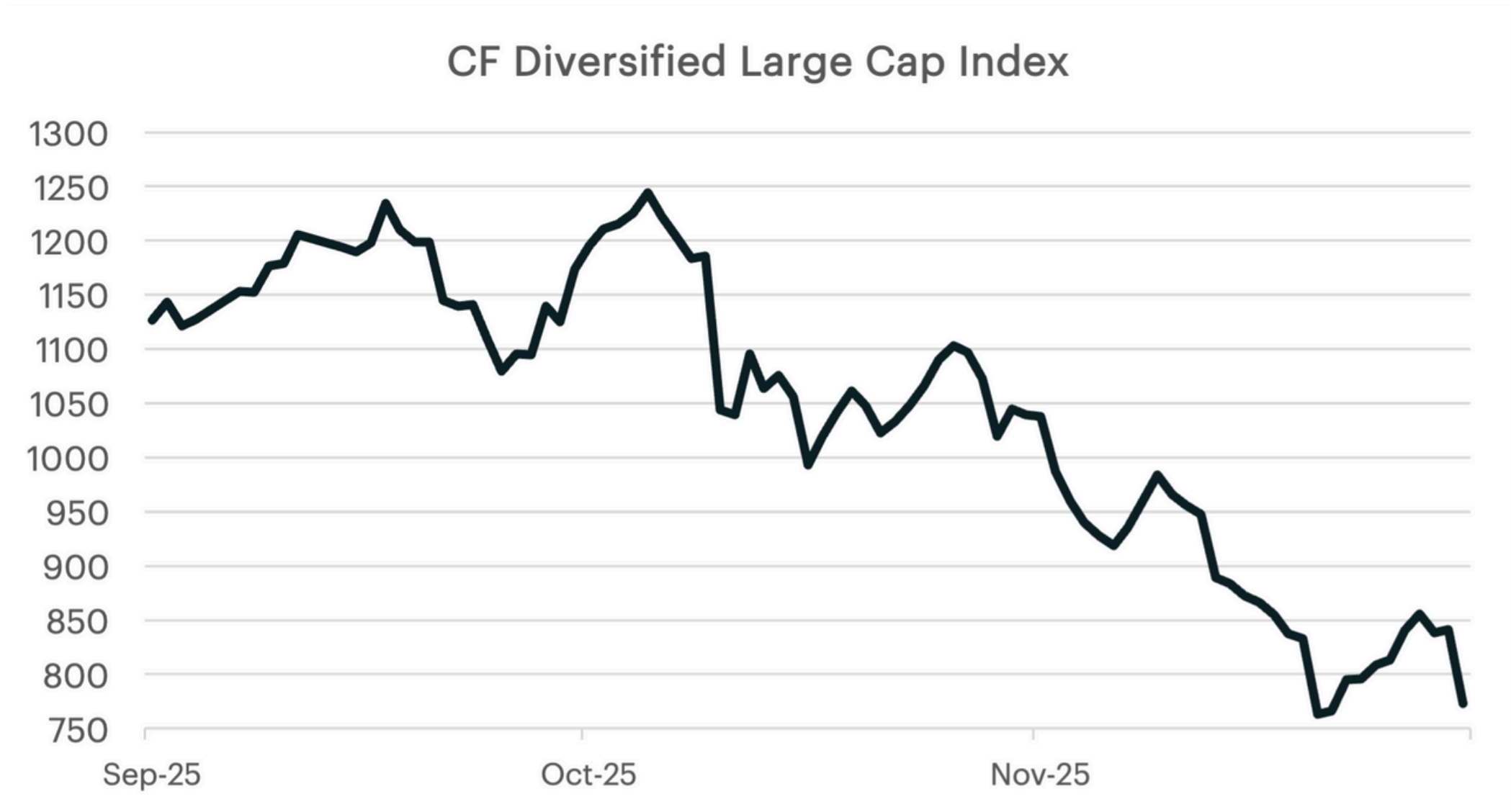
## Subtractions (-)

- 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. The CF Diversified Large Cap Index - was inceptioned 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 back tested.

Source: CF Benchmarks, Bloomberg, as of December 1, 2025



# Constituent changes: CF Diversified Large Cap Index



## Additions (+)

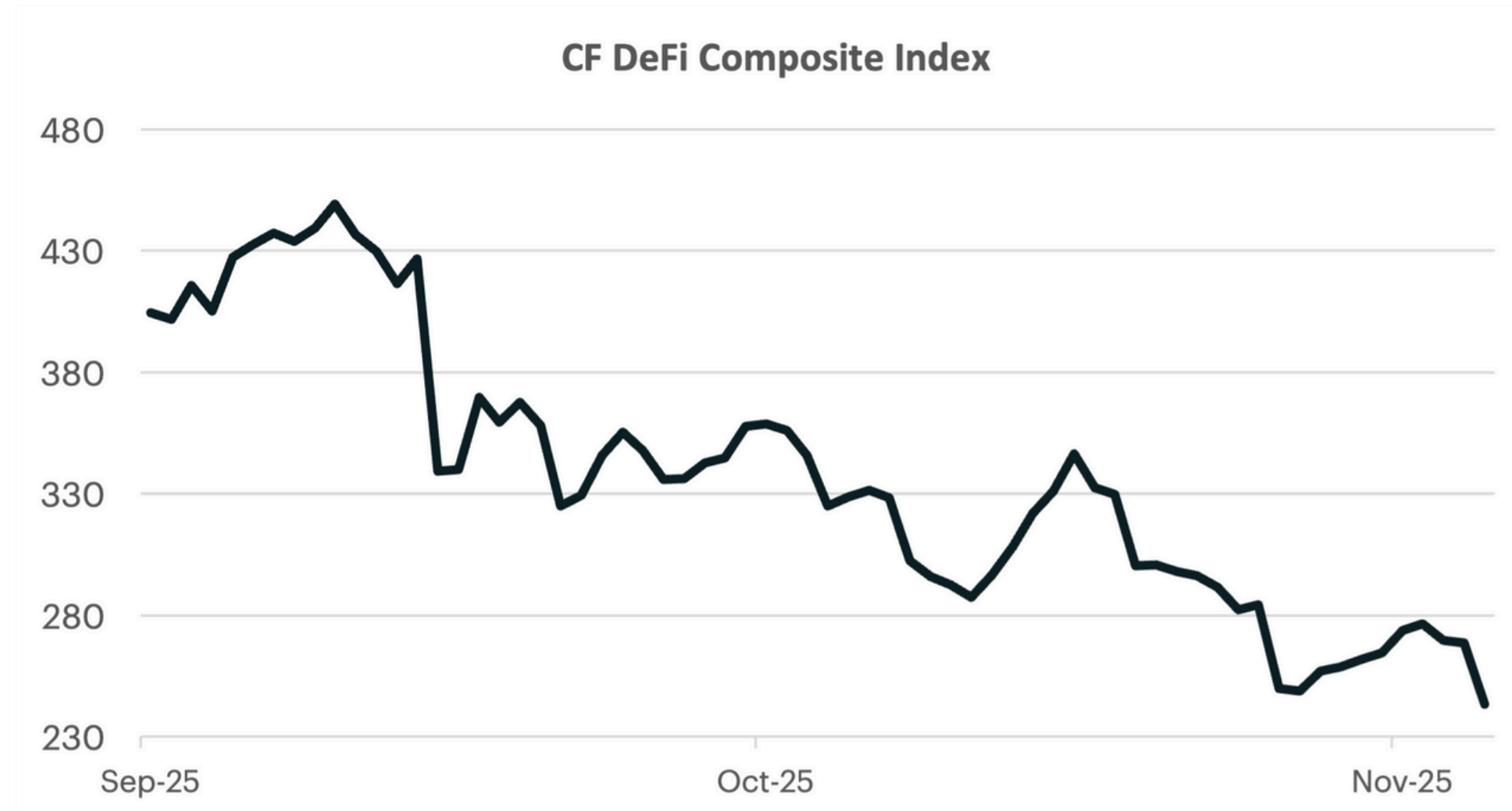
- Chainlink (LINK): Chainlink is a decentralized oracle network designed to expand the functionality and reliability of blockchain smart contracts by providing them with real-world data and off-chain computations.

## Subtractions (-)

- None



# The 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 December 1, 2025



# Constituent changes: CF DeFi Composite Index



## Additions (+)

- World Liberty Financial (WLFI): WLFI is a governance token for World Liberty Financial, a DeFi project backed by Donald Trump and family, aiming to strengthen the role of the U.S. dollar in decentralized finance.
- Ethena (ENA): Ethena (ENA) is a synthetic dollar protocol that aims to establish a stablecoin-like asset (USDe) through a delta-neutral hedging strategy.
- SKY (SKY): SKY is the governance and stability layer of MakerDAO's Endgame ecosystem, with the SKY token allowing participants to oversee protocol upgrades, treasury strategy, and the evolution of its stablecoin architecture.
- Ether.fi (ETHFI): Ether.fi is a decentralized, non-custodial liquid restaking protocol, and ETHFI grants holders influence over validator operations, reward mechanisms, and strategic protocol development.

## Subtractions (-)

- None

Source: CF Benchmarks LTD., Kraken.com



# Constituent changes: CF DeFi Composite Index (Cont.)



## Additions (+)

- Morpho (MORPHO): Morpho is a peer-to-peer lending optimization layer enhancing yields on existing lending markets, with MORPHO used to steer governance of matching engine parameters, risk settings, and incentive structures.
- EigenLayer / Eigen Cloud (EIGEN): EigenLayer is a restaking and shared security marketplace that powers the decentralized Eigen Cloud, and EIGEN coordinates governance and incentive alignment across Actively Validated Services (AVSs).
- Pyth Network (PYTH): Pyth Network is a high-frequency, low-latency oracle delivering real-time data on-chain, with PYTH enabling community governance over data-provider incentives, oracle updates, and reward distribution.
- Solana (SOL): Solana is a high-performance blockchain for scalable decentralized applications, and SOL is used for transaction fees, staking, and participation in validator governance across the network.

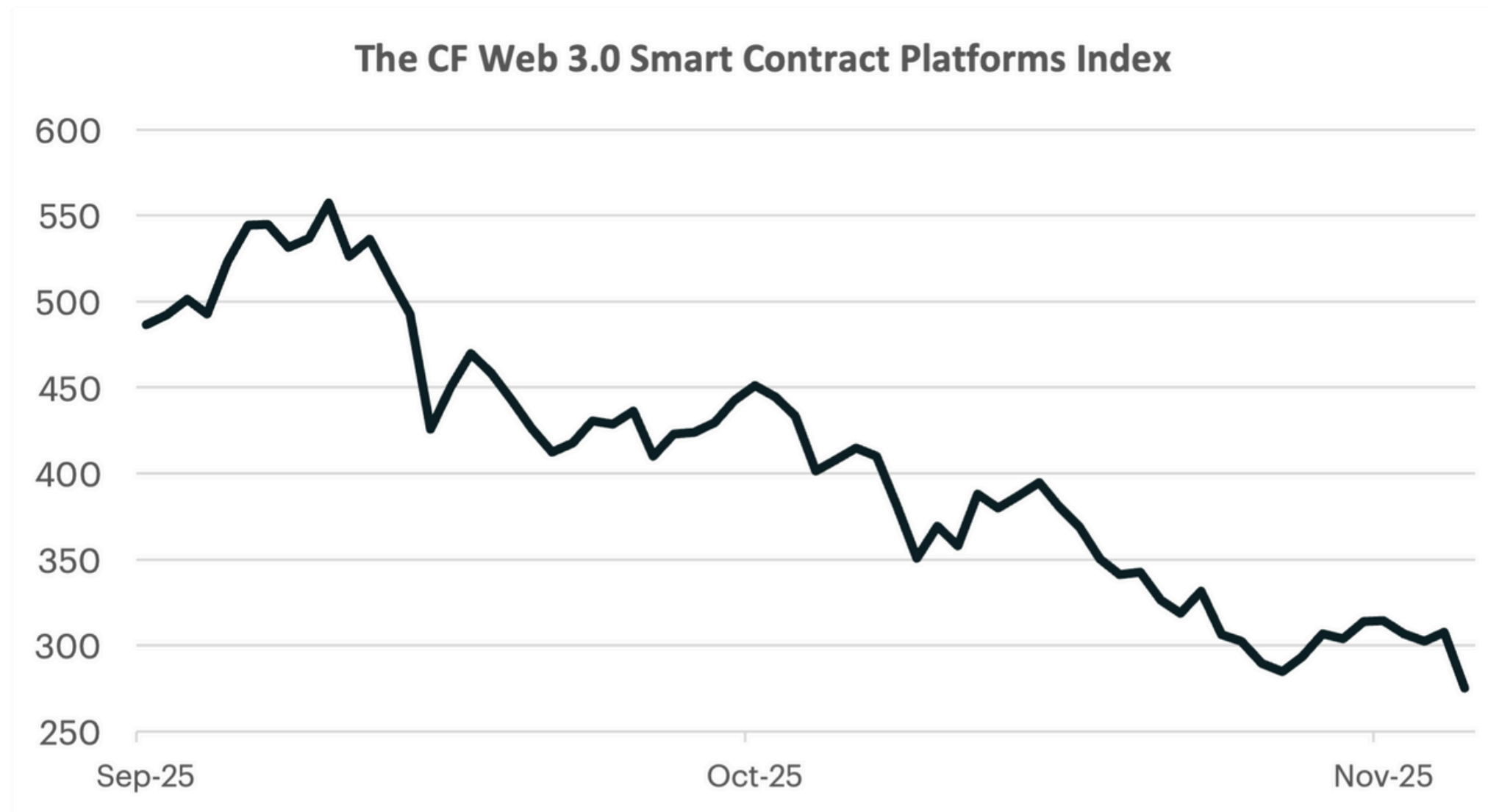
## Subtractions (-)

- None

Source: CF Benchmarks LTD., Kraken.com



# 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 inceptioned 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 December 1, 2025



# Constituent changes: CF Web 3.0 Smart Contract Platforms Index



## Additions (+)

- None

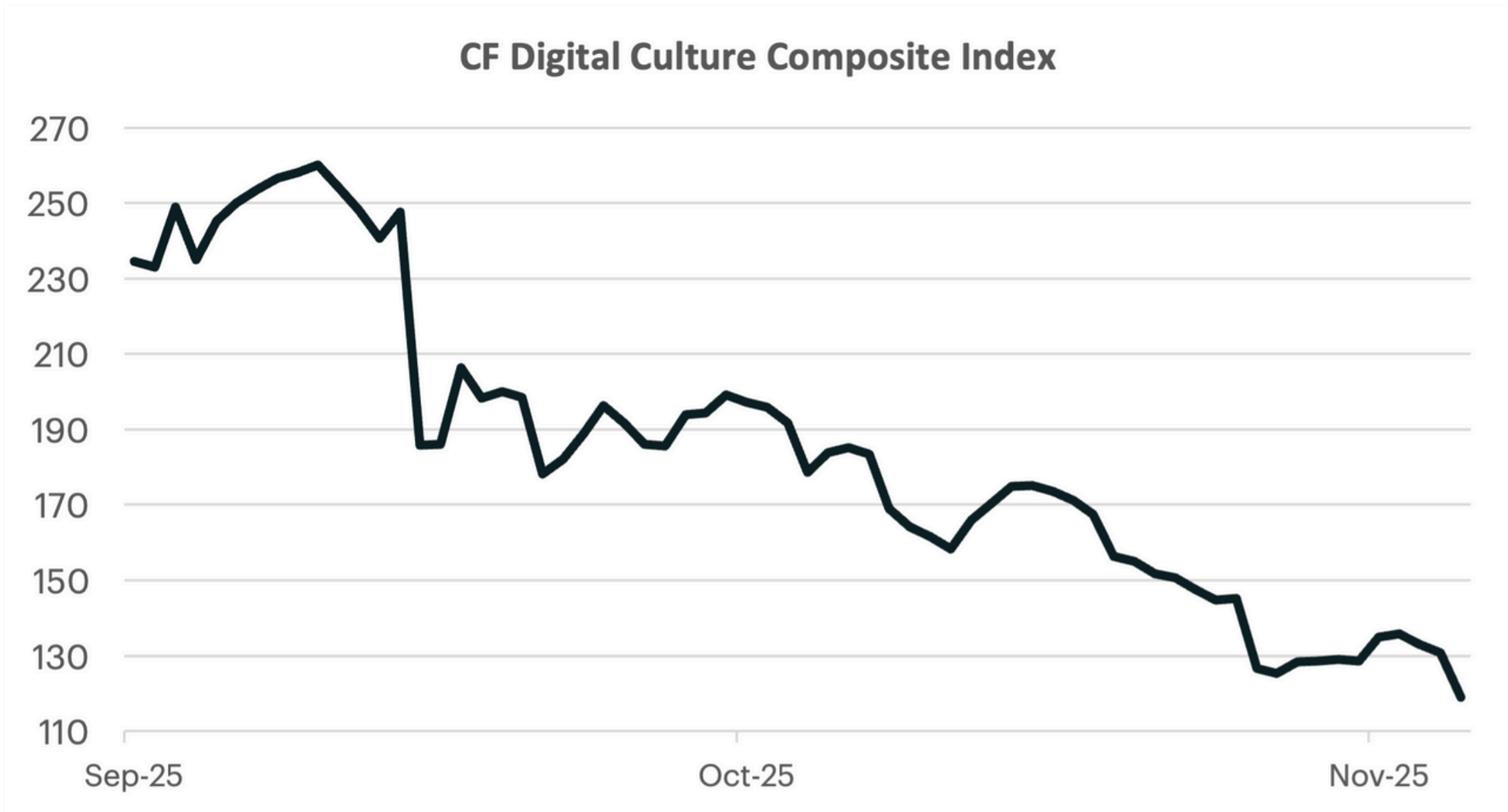
## Subtractions (-)

- None

Source: CF Benchmarks LTD., Kraken.com



# The CF Digital Culture Composite 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 December 1, 2025



# Constituent changes: CF Digital Culture Index



## Additions (+)

- Pump.fun (PUMP): Pump.fun is a meme-driven token launchpad ecosystem on Solana, and PUMP serves as its core economic asset by enabling governance decisions, incentivizing platform activity, and aligning participants around the growth of on-chain creator markets.
- Arbitrum (ARB): Arbitrum is a leading Layer-2 rollup for Ethereum focused on high-throughput, low-cost execution, and ARB functions as its governance token, allowing holders to shape protocol upgrades, allocate incentive budgets, and guide the development of the broader Arbitrum ecosystem.
- Solana (SOL): Solana is a high-performance Layer-1 blockchain optimized for parallel execution and ultra-low-latency applications, and SOL is used for transaction fees, network security through staking, and validator governance across the ecosystem’s rapidly expanding application base.

## Subtractions (-)

- None



# 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](mailto:info@cfbenchmarks.com)



## Disclaimer and Disclosures

CF Benchmarks Ltd (“CF Benchmarks”) is a limited company registered in England and Wales under registered number 11654816 with its registered office at 6th Floor One London Wall, London, United Kingdom, EC2Y 5EB.

CF Benchmarks is authorised and regulated by the Financial Conduct Authority (FCA) as a registered Benchmark Administrator (FRN 847100) under the UK Benchmarks Regulation.

CF Benchmarks is authorised to undertake the following regulated activity “Administering a Benchmark”. “Administering a Benchmark” is a regulated activity under article 63S of the Financial Services and Markets Act 2000 (Regulated Activities Order) 2001 (SI 2001/544) (RAO), which, in summary, means acting as the administrator of a benchmarks as defined in article 3.1(3) of the benchmark regulation.

CF Benchmarks is NOT a registered investment advisor and does NOT provide investment, tax, legal or accounting advice in any geographical locations. You should consult your own financial, tax, legal and accounting advisors or professional before engaging in any transaction or making an investment decision.

All information contained within is for educational and informational purposes ONLY. None of the Information constitutes an offer to sell (or a solicitation of an offer to buy) any cryptoassets, security, financial product or other investment vehicle or any trading strategy. No member of CF Benchmarks nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing contained herein or accessible through CF Benchmarks products, including statistical data and industry reports, should be taken as constituting financial or investment advice or a financial promotion.



## Disclaimer and Disclosures (cont.)

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results. The Information should not be relied on and is not a substitute for the skill, judgement and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

Charts and graphs are provided for illustrative purposes only. Index returns shown may not represent the results of the actual trading of investable assets/securities.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. However, backtested data may reflect the application of the index methodology with the benefit of hindsight, and the historic calculations of an index may change based on revisions to the underlying economic data used in the calculation of the index.

All information and data contained in this publication is obtained by CF Benchmarks, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind.

No member of CF Benchmarks nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or of results to be obtained from the use of any CF Benchmarks products.



## Disclaimer and Disclosures (cont.)

No responsibility or liability can be accepted by any member of CF Benchmarks nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any error (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of CF Benchmarks is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. CF BENCHMARKS DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IT EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of CF Benchmarks Ltd. Any use of or access to products, services or information of CF Benchmarks Ltd requires a license from CF Benchmarks Ltd.

CF Benchmarks is a member of the Crypto Research group of companies which is in turn a member of the Payward group of companies. Payward Inc. is the owner and operator of the Kraken Exchange, a venue that facilitates the trading of cryptocurrencies. The Kraken Exchange is a source of input data for CF Benchmark Indices.