CAPTURING THE LAYER-2 NARRATIVE

INTRODUCTION

While Layer-2s have lost of their sheen in recent years as BTC dominated the market, there purpose is still worthwhile. Layer-2s are built on top of existing networks, like Bitcoin and Ethereum—benefiting from the underlying networks security while aiming to improve speed and usability. The aim is to solve the blockchain trilemma and build a scalable, secure, and decentralized network.

In this report, we analyze the Kaiko L2 Index, which powers one of Gemini's index perpetual futures product. First exploring its design and purpose, before looking at diversification benefits and returns.

KEY TAKEAWAYS

- L2s lagged the market in 2024, but clearer regulations could boost returns in 2025.
- Kaiko's L2 Index saw fewer large drawdowns last year as risk metrics improved.

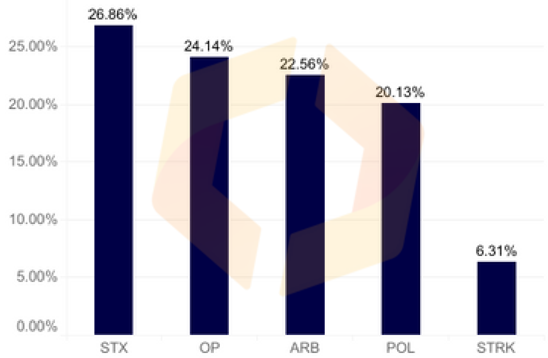
INDEX DESIGN

The Kaiko L2 Index (KSL2) tracks five Layer-2 assets across Bitcoin and Ethereum, along with Polygon (POL), which operates as a hybrid between Layer-1 and Layer-2, commonly referred to as a "sidechain."

Bitcoin's sole Layer-2 representative, Stacks (STX), holds the highest weighting in the index. The Ethereum Layer-2 assets included are Optimism (OP), Arbitrum (ARB), and Starknet (STRK), which was recently launched. Additionally, Polygon's newly rebranded POL token is part of the index.

Asset selection is driven by market capitalization and liquidity metrics, leveraging Kaiko's proprietary historical crypto market data.

Index Constituents



Source: Kaiko Indices, KSL2 Index.

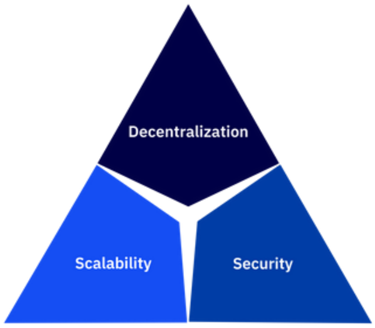
VALUE PROPOSTION

The Layer-2 ecosystem is a key growth area for crypto. As noted above these protocol's are built on top of existing networks, with speed and scalability in mind.

In essence all of the projects included in this index aim to address the blockchain trilemma. This phrase was coined by Ethereum's Vitalik Buterin and refers to the trade off between scalability, security and decentralization.

The Kaiko L2 Index streamlines the process for investors looking to benefit from breakthroughs in this sector of crypto.

The Blockchain Trilemma



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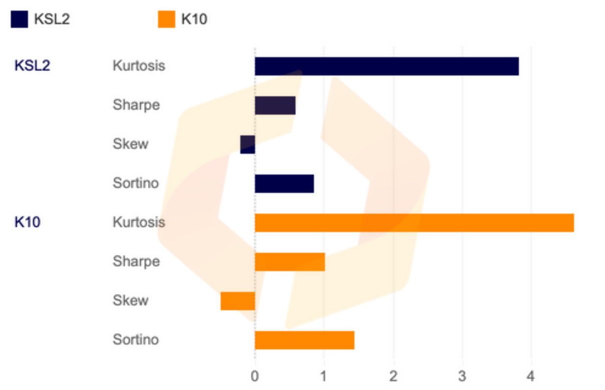
DIVERSIFICATION BENEFITS

Key Metrics and Statistics



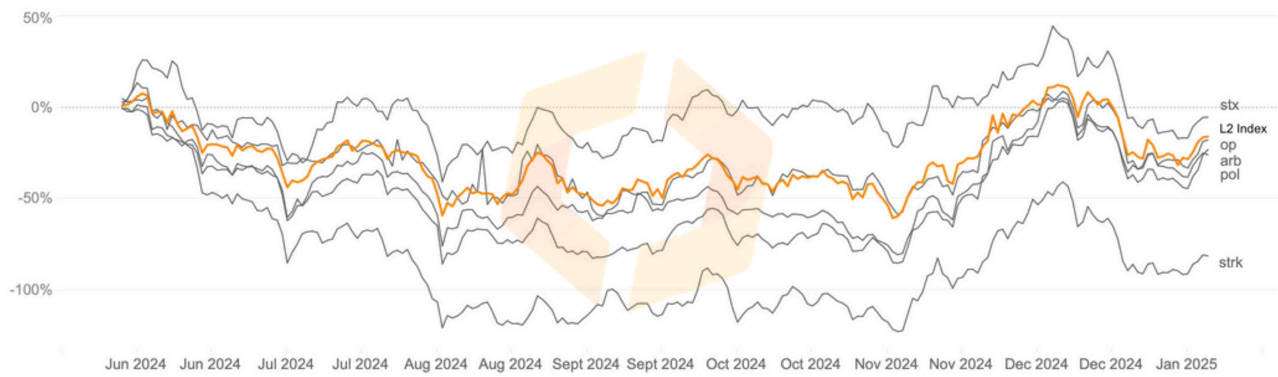
Source: Kaiko calculations based on index performance data.

As well as tracking the returns of assets tied to the Layer-2 narrative, the KSL2 Index offers more diversification. For instance the largest asset in the index is Bitcoin Layer-2 Stacks, despite this the index's overall correlation to BTC/USD is not as high as other strategies. The KSL2 Index has a rolling correlation of 67% with BTC/USD, whereas the KT5 (Kaiko Top 5), KT10 (Kaiko Top 10), and KT15 (Kaiko Top 15) indices all exceed 87%.

Despite underperforming the K10 index KSL2 has exhibited some encouraging results. The KSL2's kurtosis of 3.81 is lower than the K10's 4.6. And while both indices exhibit negative skew, it is more pronounced in K10—there is a higher chance of negative outcomes when outliers do occur.

COMPETITIVE RETURNS

Index Performance vs. Individual Assets



Source: Kaiko calculations based on index performance data.

The KSL2 Index has traded higher since the U.S. election, likely signalling improving regulatory prospects for 2025 and beyond.

The U.S. wants to create a "golden age" in digital assets, according to crypto czar David Sacks. This represents a major shift from the past few years and marks the first time in history that a U.S. administration has set clear policy on crypto. That shifting outlook will be particularly important for assets included in the Layer-2 Index.

Ethereum Layer-2s in the index—STRK, OP, ARB, and POL—have been weighed down by regulatory headwinds tied to the Layer-1 and proof-of-stake tokens. Notably Polygon was flagged by the previous Securities and Exchange Commission leadership as a security. Since the leadership at the regulator has changed and sentiment shifts, there is one less headwind contend with. This should benefit all of these projects, and in particular POL.

Sector rotation is another potential tailwind for L2 assets. BTC dominated the crypto market in 2024, setting record highs before and after the U.S. election as institutional investors poured billions into spot BTC exchange-traded funds. However, the rally hasn't yet extended beyond BTC, as has historically been the case. While the crypto market structure has evolved, a rotation to smaller assets remains likely as investors seek higher upside potential via high-beta tokens.

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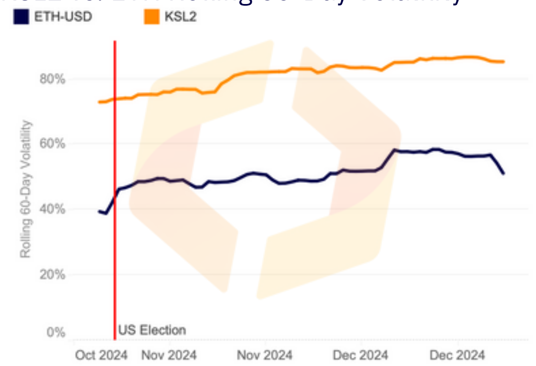
KSL2 vs. ETH Rolling 60-Day Volatility



Source: Kaiko calculations based on index performance data.

UPTICK IN VOLATILITY ACROSS THE MARKET

Volatility has trended higher since the US election. The rolling 60-day volatility of the KSL2 index increased by 12 percentage points since November, matching ETH-USD's increase over the period. The jump is tied to shifting market sentiment as prices whipsawed across the board.

BTC led gains into the end of the year, which likely caused some increased vol in STX. At the same time the price of ETH flipped either side of $3k since November due to the changing regulatory narrative and idiosyncratic factors. A large driver of froth in ETH-related markets has been competition from rival Layer-1 Solana and leadership concerns at the Ethereum foundation.

RISK-RETURN PROFILE

It's also important to note that while volatility can be a symptom of risk and might indicate the presence of risk, it is not risk. To get a more definite view of the index's risk profile we looked at its Sortino ratio. This measures risk-adjusted performance by focusing on downside volatility, unlike the Sharpe ratio which accounts for both upside and downside risk. A solid score here is 1, essentially it means an index produced one unit of excess return for every unit of risk—the higher the better. The KSL2's Sortino is around 0.87 currently, and has been trending higher since June 2024.

Kaiko SL2 Sortino Ratio

Source: Name of the Indices or Kaiko Data Product

PERPETUAL FUTURES IN L2 TOKENS

The KSL2 is already in use as the index powering Gemini's pioneering basket perps. With this index, Kaiko supports the launch of index perpetuals on Gemini Derivatives, the dedicated non-US derivatives platform by Gemini. As one of the few index perpetual products available to traders on centralized platforms, this offering fills a critical gap in the market by broadening diversification options for investors and enabling them to explore innovative trading strategies in a reliable and trusted environment.

CONCLUSION: STREAMLINED SECTOR INVESTING

Investing in Bitcoin has become more accessible than ever, yet identifying high-quality opportunities beyond BTC remains increasingly challenging. While the broader crypto bull market has yet to fully extend to altcoins, evolving regulatory dynamics could serve as a catalyst for renewed interest. As policy shifts in Washington and investors explore opportunities beyond Bitcoin, the Kaiko L2 Index provides a streamlined approach to tracking the performance of the Layer-2 sector—positioned for significant growth in 2025.

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