

Compass SESAMm Crypto Sentiment Index

The first-ever index to weight the top
cryptocurrencies with a sentiment tilt

The case for investing in digital assets

The global market shows an overall increase in market adoption of cryptocurrency every year.

Cryptocurrency is a relatively new asset class in its own right with real growth potential. Its decentralized system makes for unique key features. There is no intermediary, and no central bank based on Blockchain technology. Moreover, unlike traditional assets such as stocks and bonds, cryptocurrency is not tied to any central authority or government. This provides certain benefits that traditional assets cannot offer, such as reduced transaction fees and increased transparency.

Investors should look to cryptocurrency as an area with potential for growth and technological innovation for a number of reasons, including:

- Recent data suggests that cryptocurrency may offer diversification potential for portfolios
- Current challenges are already beginning to lessen as blockchain enablers continue making new progress
- Crypto infrastructure paves the way for a new digital framework as well as the development of user-owned decentralized applications
- The tokenization of real assets allows for less complicated and more efficient ways to issue, manage and transact assets

However, the same characteristics that led to cryptocurrency's rise in popularity can also make investing in it complicated. The volatility, in addition to the lack of regulatory oversight in the crypto market create inherent risks. To address this, it is important to reconcile the traditional finance world with the crypto world and develop dedicated tools to democratize investment into cryptocurrency.

Integration of Artificial Intelligence

Navigating the digital asset space can prove challenging. The uncertain regulatory framework, extremely volatile environment and fast-paced ecosystem all make the construction of a representative, robust and performing benchmark difficult.

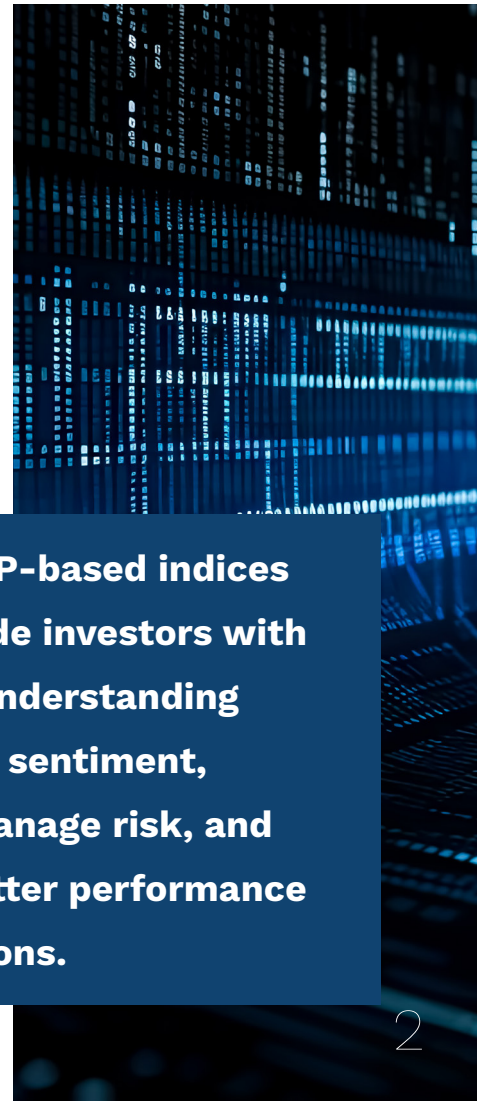

Artificial intelligence is the perfect tool to manage these obstacles. The latest AI and machine learning developments allow investors to benefit from innovative tools that improve risk management and enhance long-term performance. By integrating natural language processing (NLP) and sentiment data, the news effects and inherent reputation risks are better understood.

Benefits of integrating NLP and sentiment data:

- Access to all the meaningful public information from all types of sources to capture any coin and determine where the action is

- Screen billions of articles daily to provide representative and up-to-date information

- Analyze each implication and associated documents to provide reliable indicators to assess if the underlying coin benefits from a positive or negative market sentiment



AI and NLP-based indices can provide investors with a better understanding of market sentiment, help to manage risk, and create better performance expectations.

A unique partnership for a unique index

Compass Financial Technologies and **SESAMm**, both leaders in their respective fields, have decided to join forces and combine the best aspects of crypto-based indices and natural language processing together with the creation of the **first crypto-sentiment index**.



Leading Swiss index provider

Pioneer in alternative assets

Over 20 years of experience in the index industry

Over 4 years of experience in the cryptocurrency industry

Utilizes ultra-modern, cloud-native underlying technology

EU BMR-compliant framework

Active across all asset classes

Locations in Lausanne, Paris and New York

Computes over 1500 indices for institutional clients

Leading artificial intelligence and NLP company

Trusted by top asset management, banks and private equity firms since 2014

20 bn articles, four million sources and 70 million entities

Granular data on all asset classes (public & private equity, fixed income, commodities, crypto and thematic investing)

Real-time insights and historical data up to 15 years

Coverage of ninety pre-built ESG event categories based on standard frameworks

Access to granular data to capture new thematic opportunities

Offices in France, New York, London, Japan, and Singapore

Index objective

The **Compass SESAMm Crypto Sentiment Index** aims to **give investors exposure to the crypto market with a sentiment tilt** to determine the selection and weights of underlying coins.

The index selects coins based on financial filters such as average trading volume and market capitalization. The use of NLP-based sentiment scores in the weighting mechanism allows the index to efficiently rebalance towards the coins with the best sentiment scores and therefore those with the highest expected relative returns.

Key Features

- Provides a smart and dynamic exposure to the cryptocurrency market
- Monthly review to adapt to the fast-moving crypto ecosystem and capture up-to-date/representative sentiment for each coin
- Unique quantitative weightings mechanism based on liquidity filters and sentiment scores
- Invests in a basket composed of the 20 main crypto coins
- Constituents are selected based on rigorous criteria considering liquidity, tokenomics, sentiment, custody, and security
- Methodology and governance in line with the most strict financial indices regulation, the European Benchmark Regulation (EU BMR)

Index mechanisms

The Compass SESAMm Crypto Sentiment Index is a diversified digital asset index designed to offer broad exposure to the market's top crypto assets (all sectors included), while capping each component exposure at 30%. Weightings are based on sentiments scores, liquidity and market capitalization constraints.



Scoring mechanisms

SESAMm's NLP technology carries out a granular and transparent analysis of publicly available articles. **More than 20 billion articles from over 4 million international and local sources are analyzed** to identify each coin's associated mentions. For each source, **indicators of sentiment and volume of mentions are determined**. These indicators are then aggregated daily to create a historical time series per cryptocurrency, which acts as the basis for the overall score used by Compass Financial Technologies. For each day and each coin, SESAMm calculates crypto sentiment scores based on several indicators such as polarity, volume and memory functions to provide up-to-date and representative scores.

SESAMm's Crypto sentiment scores are based on the sentiment scores (negative, positive, and neutral) computed on articles related to the 50 digital assets universe.

● POLARITY

$$Polarity(t) =$$

$$\frac{PositiveSentiment(t) - NegativeSentiment(t)}{PositiveSentiment(t) + NegativeSentiment(t)}$$

Negative/positive sentiment (t):

The average negative/positive sentiment calculated for day t for a given crypto. This daily sentiment is calculated by aggregating article-level sentiment.

Different variants of the score are created by varying several parameters:

Memory:

The crypto universe is much more volatile, as actions move faster compared to classical finance. We use a half-life of 7 days to weigh the importance of related articles for each coin. A half-life of 7 days means that an article that is 7-days-old counts for 50% compared to an article published today.

Volume:

Weighting the sentiment by volume to highlight days with significant events.

● CRYPTO SENTIMENT SCORE

$$CryptoSentimentScore(t) =$$

$$\frac{\sum^t (1-\alpha)_k^{t-k} \cdot volume(k) \cdot polarity(k)}{\sum^t (1-\alpha)_k^{t-k} \cdot volume(k)}$$

Volume: Number of articles related to the entity on day k

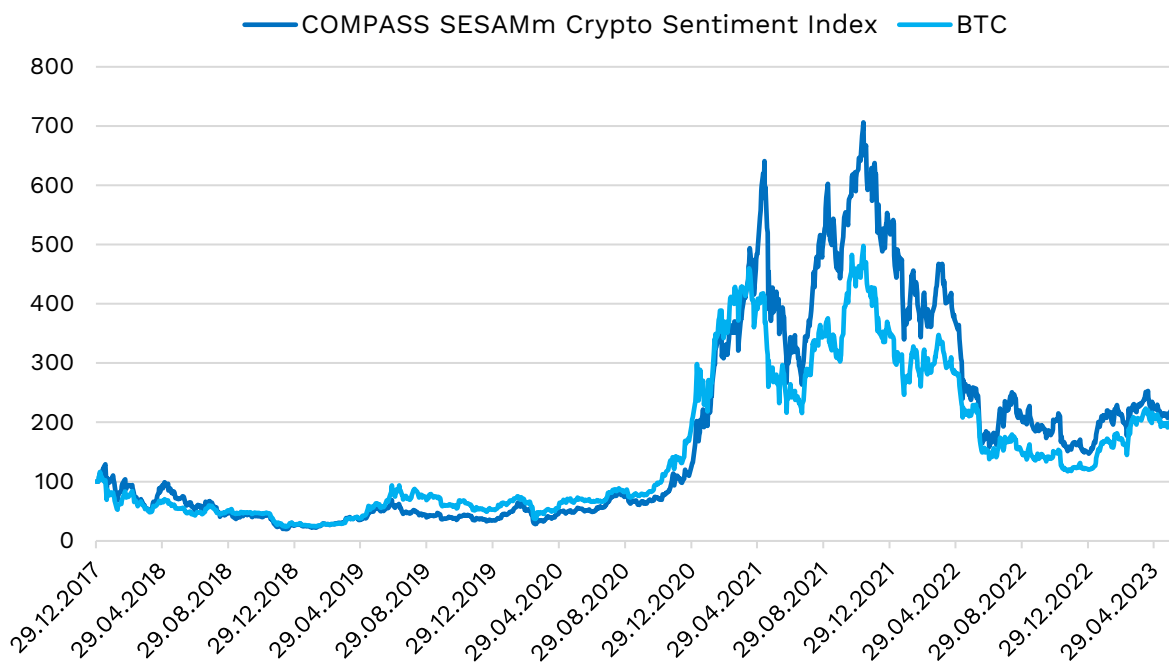
Polarity: Average polarity of articles related to the entity on day k

Alpha: Memory parameter

Analytics

Facts and Figures

Performance *



Key Indicators *

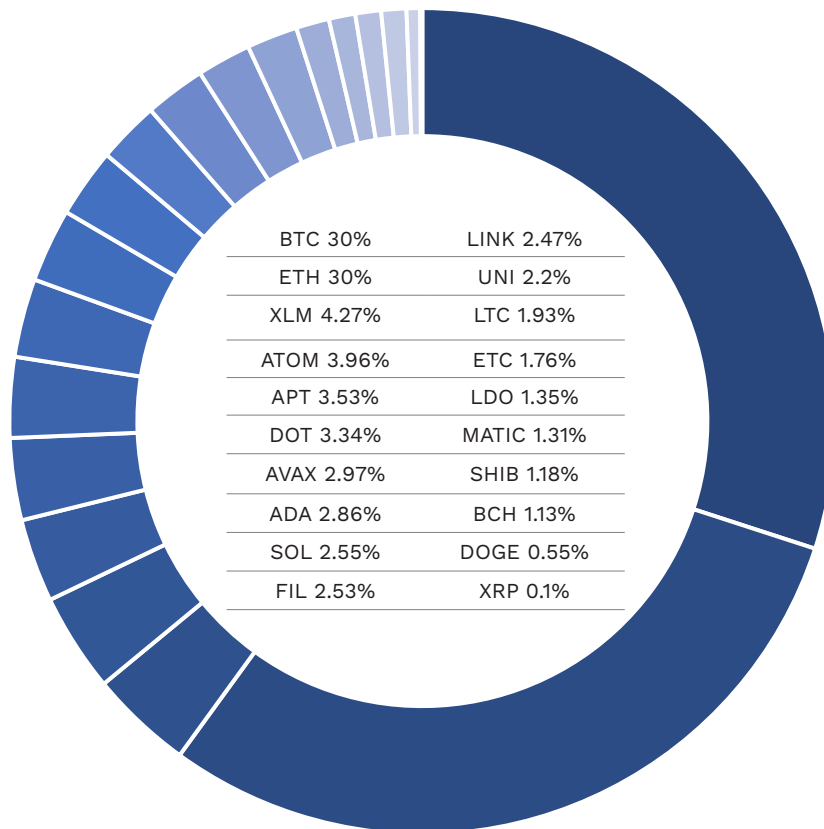
STATISTICS	COMPASS SESAMM CRYPTO-SENTIMENT INDEX	S&P 500	US AGGREGATE BOND	COMMODITY	BTC
Return since inception	164.9%	55.0%	2.9%	10.8%	96.5%
Annualised Return	20.4%	8.4%	0.5%	1.9%	13.3%
Annualised Volatility	80.6%	21.4%	5.0%	15.8%	70.6%
Worst daily drawdown	-85%	-34%	-18%	-35%	-80%
Annualized Sharpe Ratio	0.19	0.17	0.86	0.18	0.12
1 year return	-49.2%	1.2%	-2.1%	-25.4%	-14.3%
3 year return	584.4%	37.3%	-10.6%	54.2%	185.9%
5 year return	327.3%	52.8%	4.5%	8.3%	263.8%
Year to date	56.0%	8.9%	2.5%	-13.2%	63.7%

* As of May 31st, 2023

Analytics

Facts and Figures

Index weights and components *



Correlation analysis *

	INDEX	SP500	US AGG	BCOM	BTC	ETH	US CPI
INDEX	1.00	0.16	0.01	0.17	0.90	0.94	0.03
SP500	0.16	1.00	0.02	0.31	0.13	0.14	0.01
US AGG	0.01	0.02	1.00	0.02	0.00	0.02	0.03
BCOM	0.17	0.31	0.02	1.00	0.16	0.16	-0.05
BTC	0.90	0.13	0.00	0.16	1.00	0.79	0.00
ETH	0.94	0.14	0.02	0.16	0.79	1.00	0.05
US CPI	0.03	0.01	0.03	-0.05	0.00	0.05	1.00

* As of May 31st, 2023

Going forward...

The Compass SESAMm Crypto Sentiment Index is a revolutionary index that will grant investors unprecedented insight regarding digital assets.



NEW ASSET CLASS

Cryptocurrency continues to be a relevant and lucrative area for investors seeking exposure to technological innovation

AI INTEGRATION

Integrating artificial intelligence helps mitigate risks associated with crypto investments. NLP technology rapidly analyzes thousands of articles to determine user sentiment for the 30 main crypto coins

GLOBAL MARKET VIEW

The Compass SESAMm Crypto Sentiment Index gives a global view of the cryptocurrency community and market

EASILY REPLICABLE

Filters on volumes and market cap allow access to most liquid assets, making the Crypto Sentiment Index easily replicable in terms of trading for investors



About us



Compass Financial Technologies SA is an independent Swiss-based company focused on the design, calculation and administration of market benchmarks and tailor-made quantitative investment strategies.

Founded in 2017, Compass has locations in Lausanne, Paris and New York. For more than 20 years, the team at Compass has been developing recognized benchmarks ranging from simple vanilla indices to complex index strategies based on quantitative models and market intelligence. Compass calculates nearly 1,500 indices for institutional clients, from investment banks and pension funds to asset managers related to all asset classes.

Compass Financial Technologies (France) is a registered Benchmarks Administrator by the Autorité des Marchés Financiers (AMF) under the EU Benchmarks Regulations (EU BMR).

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SESAMm is a leading artificial intelligence and NLP technology company serving global investment firms, corporations, and investors, such as asset managers, banks, private equity firms, hedge funds, and index providers.

With over 100 employees and six offices worldwide, SESAMm celebrated its 8th anniversary in 2022. SESAMm analyzes more than 20 billion documents in real time to generate insights and indicators for controversy detection on investments, clients and suppliers, ESG, and positive impact scores, among others.

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