

# Compass SESAMm Crypto Sentiment Adaptive Indices

AI sentiment-guided crypto investing  
Optimized exposure,  
Minimized uncertainty

# Investing in digital assets

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

The global adoption of cryptocurrency is consistently increasing each year, and recent developments, such as the SEC approval for Exchange-Traded Funds (ETF) on Bitcoin (BTC), signify a significant milestone. Cryptocurrency, as a relatively new asset class, continues to demonstrate real growth potential. Its decentralized nature, facilitated by Blockchain technology, eliminates the need for intermediaries and central banks. This decentralized structure becomes even more pronounced with the recent SEC approval, which allows for the creation of ETFs linked to Bitcoin.

Unlike traditional assets like stocks and bonds, cryptocurrency operates independently of any central authority or government, offering advantages such as reduced transaction fees and enhanced transparency.

Investors are increasingly recognizing cryptocurrency as a viable option for potential growth and technological innovation. Several factors support this viewpoint:

- Recent data suggests that cryptocurrency may offer diversification potential for portfolios

- Ongoing advancements in blockchain technology, coupled with the recent SEC approval for Bitcoin ETFs, are addressing current challenges in the crypto market.

- The crypto infrastructure is paving the way for a new digital framework and the creation of user-owned decentralized applications.

- Tokenization of real assets enables simpler and more efficient issuance, management, and transactions of assets.

However, it's important to acknowledge that the same factors contributing to cryptocurrency's popularity, such as its volatility and the lack of regulatory oversight, also introduce complexities and inherent risks. To navigate these challenges, bridging the traditional finance world with the crypto world and developing dedicated tools become crucial. The recent SEC approval serves as a step towards this integration, fostering the democratization of cryptocurrency investments and positioning them as a compelling choice for global diversified capital asset allocation over the long run.

# Navigating Market Swings

## The benefits of a Risk-On / Risk-Off approach when investing in the digital asset space

Risk-On/ Risk-Off strategies intelligently adapt to market environment, optimizing asset allocation based on specific signals. Digital assets, renowned for their volatility and promising potential high returns during optimistic market phases, are good candidates for the risk-on asset (or risky asset). Leveraging Gold, a steadfast risk-off anchor, offers stability during uncertainties, serving as a safe-haven and inflation hedge and keeping consistency between “value reserve” strategies. Choosing T-Bills as a risk-off asset (or “Safe” asset) offers capital preservation, predictable returns, and attractive yield as of today’s high interest rates environment. T-Bills suits risk-averse investors seeking safety and a conservative approach in volatile markets.

These dynamic duos (Digital asset/Gold - Digital asset/T-Bills) provide diversification, flexibility, and an alternative to traditional assets, enhancing risk-adjusted performance. Strategy’s innate adaptability aligns portfolios with ever-changing market conditions, ensuring a balanced and resilient investment approach.

**Diversification:** Combining digital asset and Gold/T-Bills in a Risk-On/Risk-Off strategy offers a diversified approach to risk management. T-Bills & Gold’s stability during risk-off phases can counterbalance the potential volatility of digital assets during risk-on periods, creating a more balanced portfolio.

**Flexibility:** Risk-On/Risk-Off strategies allow for adaptability based on changing market conditions. When risk sentiment shifts, the allocation between digital asset and Gold/T-Bills is adjusted to optimize returns and manage risks effectively.

**Alternative to Traditional Assets:** Including digital asset alongside Gold/T-Bills provides exposure to alternative assets outside traditional financial markets. This can be appealing to investors looking for non-traditional options to enhance their portfolio’s risk-adjusted returns.

# Unlocking potential with generative AI

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 Generative AI and machine learning developments allow investors to benefit from innovative tools that improve risk management and enhance long-term performance. By integrating AI-based sentiment data, the news effects and inherent reputation risks are better understood.

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

# Strategy objective

The **Compass SESAMm Crypto Sentiment Adaptive Indices** (the “**CSA**”) is a family of strategy indices which leverage on crypto sentiment scores generated by SESAMm to provide a dynamic exposure to the digital asset space (bitcoin or any other crypto indices). The strategy aims to allocate to the crypto assets when the global crypto sentiment is positive and to switch the exposure to a “safe” asset (gold, T-Bills, ...) when the global crypto sentiment turns negative.

**The main objective of the strategy is to provide exposure to the price of digital assets while minimising volatility and drawdowns during crypto market corrections.**

## Key Features

- Provide a smart and **dynamic exposure** to digital assets
- **Reduce drawdown and volatility** during crypto bearish market phases
- **Monthly review** to adapt to the fast-moving crypto ecosystem
- **Unique quantitative allocation mechanism** allowing to switch allocation between a selected digital asset exposure and a “safe” asset
- The choice of risky asset, safe asset, leverage and minimum and maximum exposure can be adjusted to suit the client’s investment constraints and needs
- Methodology and governance **in line with the European Benchmark Regulation (EU BMR)**

# Index mechanisms

The strategy leverages on **Crypto Sentiment Scores** to allocate more to the crypto asset when the global crypto sentiment is positive and to switch the exposure to a “safe” asset when the global crypto sentiment becomes negative.

To maximize the robustness of the strategy, the sentiment based signal (the Sentiment Signal) is coupled with a trend following signal on the price of the crypto asset (the Price Signal).

In the case of uncertainty when the two signals aren't synchronized, the strategy uses a risk approach coupled with the strength of the active signal to define the risky asset exposure.



# Scoring mechanisms

SESAMm's AI & Sentiment 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 main digital assets universe.

## ● POLARITY

$$Polarity(t) =$$

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

### Positive/negative 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

$$CryptoSentimentScore(t) =$$

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

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

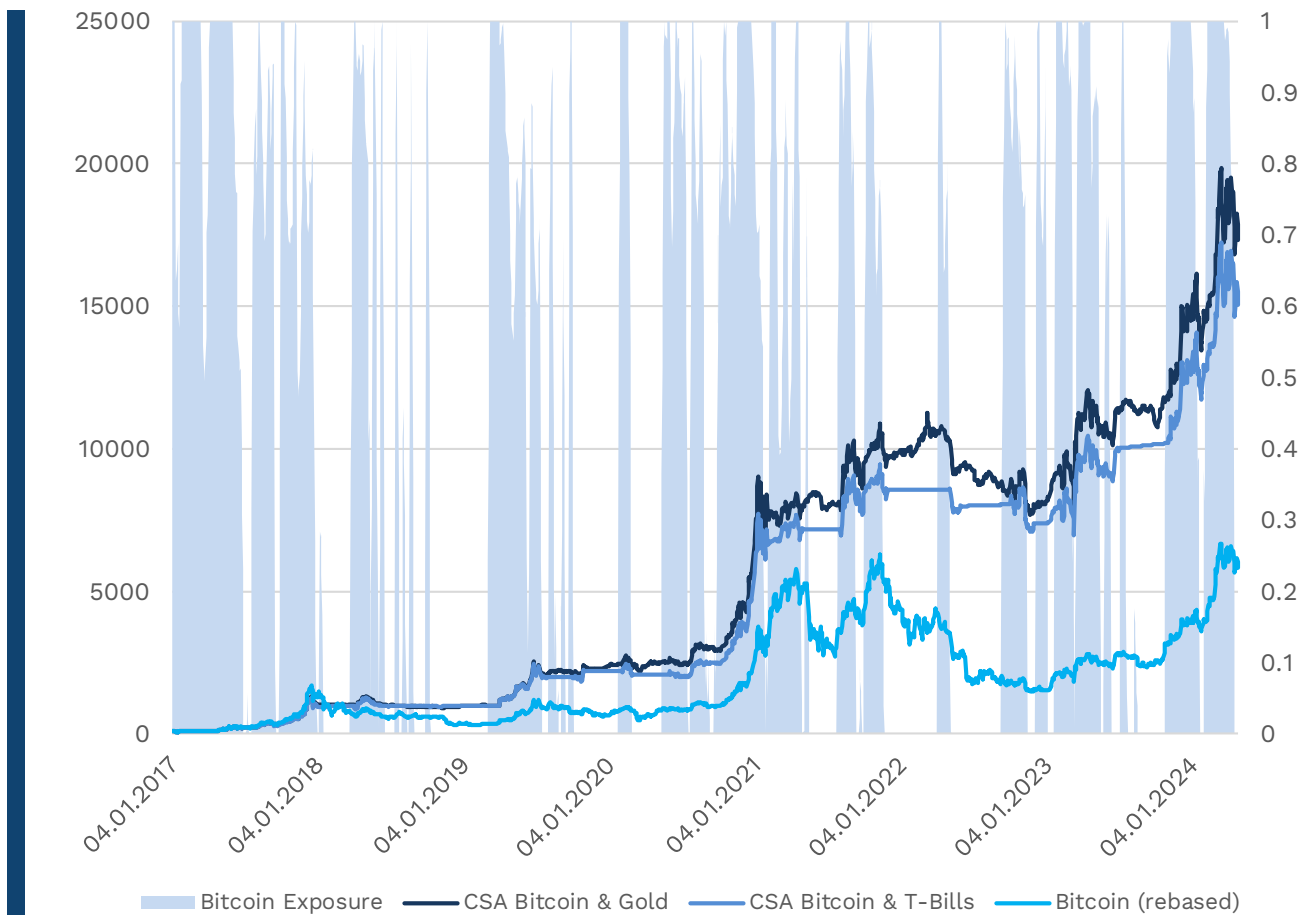
**Polarity:** Average polarity of articles related to the entity on day k

**Alpha:** Memory parameter

# Analytics

## Facts and Figures

### Performances \*



\* As of April 25th, 2024



# Analytics

## Facts and Figures

### Statistics \*

STATISTICS	BITCOIN	GOLD	CSA BITCOIN & GOLD	CSA BITCOIN & T-BILLS
Return since inception	5739.8%	97.7%	17242.5%	14965.2%
Annualised Return	74.4%	9.8%	102.5%	98.6%
Annualised Volatility	71.7%	13.5%	46.9%	45.8%
Annualized Sharpe	1.04	0.72	2.19	2.15
Annualized Sortino	1.5	1.0	3.1	2.49
Maximum drawdown	-82.6%	-21.1%	-31.7%	-31.9%
Correlation with Bitcoin			0.74	0.73

### Returns over specific market regime \*

	BITCOIN	GOLD	CSA BITCOIN & GOLD	CSA BITCOIN & T-BILLS
<b>Bullish Market</b>				
01.09.2017 - 15.12.2017	266.8%	-5.3%	219.9%	221.0%
01.02.2019 - 30.06.2019	240.9%	6.9%	133.3%	135.9%
01.10.2020 - 15.03.2021	419.4%	-9.5%	166.2%	190.6%
<b>Bearish Market</b>				
15.12.2017 - 14.12.2018	-81.5%	-1.5%	-25.1%	-20.1%
11.11.2021 - 30.12.2022	-74.6%	-2.4%	-22.8%	-19.0%
<b>Yearly Return</b>				
2017	1226.3%	11.1%	950.8%	907.1%
2018	-73.7%	-1.3%	-7.0%	-3.9%
2019	89.5%	18.3%	142.9%	127.5%
2020	298.6%	24.2%	186.4%	161.2%
2021	67.4%	-4.1%	46.2%	49.1%
2022	-65.6%	-0.1%	-17.9%	-13.7%
2023	158.7%	13.4%	78.5%	71.3%
2024	48.9%	12.9%	19.1%	18.9%

\* As of April 25th, 2024

# Going forward...

The **Compass SESAMm Crypto Sentiment Adaptive Indices** will grant investors unprecedented insight regarding digital assets.

## NEW ASSET CLASS

Cryptocurrency continues to be a relevant and **lucrative** area for investors seeking **alternative asset classes**

## AI INTEGRATION

Integrating artificial intelligence helps **mitigate risks associated with crypto investments**. **AI-based technology** rapidly analyzes thousands of articles to determine market sentiment for the main digital assets

## DYNAMIC EXPOSURE

The strategy mechanisms allow investors to **navigate crypto market swings**. Exposure to the digital asset is reduced during periods of negative market sentiment, minimizing the potential drawdown of the crypto market

## EASILY REPLICABLE

The strategy is **rebalanced monthly** and can be easily implemented in an ETF or ETP



# A unique partnership for a unique index

**Compass Financial Technologies** and **SESAMm**, both leaders in their respective fields, combine the best aspects of crypto-based indices and AI-based natural language processing, and continue to innovate with the launch of the **Crypto Sentiment Adaptive** index suite.



Leading Swiss index provider

Pioneer in alternative assets

Over 20 years of experience in the index industry

Over 6 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 2'000 indices for institutional clients

Leading generative AI, ESG & NLP-based company

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

20 bn articles, 4 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

# 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 2'000 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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