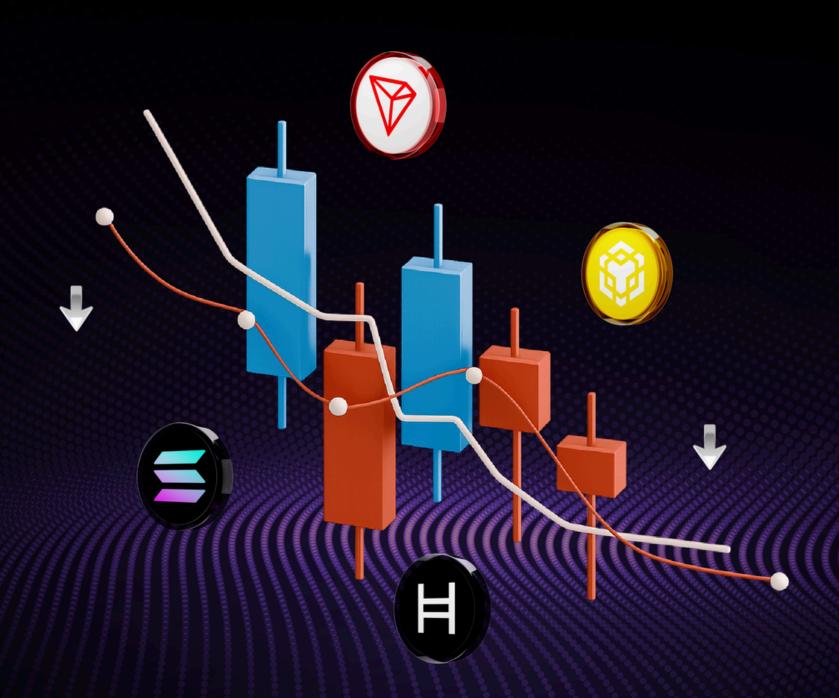


# Price-Sentiment Dynamics in Recent Bearish Period

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# **Index**

Highlights	02
Introduction	03
Market Sentiment Indicators	04
Crypto Total Market-Cap Index and BBP Overlay	05
Price-vs-Mood Dynamics in the Bearish Period	07
Conclusion	09
References	10





# **Key Highlights**

- This study investigates the relationship of Mood Index and price returns across cryptocurrencies in a bearish trend.
- In the bearish window, mood drops produced only mild price declines (-1 % to -4 %).
- In the downturn (27 Jan 13 Apr 2025), most coins fell with mood, yet **BNB, TRX, and HBAR** classified as Counter-trend Movers—held steady or gained, showing defensive demand, whereas **SOL**, the lone Under-performer, dropped more than its sentiment reading implied, suggesting coin-specific headwinds.
- In the bearish phase, counter-trend movers maintained flat or slightly positive price returns despite the broader market decline. This highlights that sentiment remains a key driver across market regimes.





### Introduction

Cryptocurrencies have emerged as a major asset class, attracting a wide range of investors. Despite this growth, their prices remain highly volatile and often separated from traditional valuation metrics like discounted cash flows or book value [1][2]. A growing body of academic research and practitioner analyses highlights behavioural factors—such as collective sentiment, social media dynamics, and narrative shifts—as key drivers of these sharp price movements [3][4]. In markets characterized by heavy retail participation and real-time information exchange, investor sentiment can significantly amplify trends, fueling rapid price surges during periods of optimism and exacerbating declines during fear-driven selloffs. This effect is particularly visible on social media channels related to cryptocurrencies such as X/Twitter, Telegram, and Reddit, where sentiment spreads virally in moments [5][6].

We can identify 3 types of trends across crypto industry, which are in line with traditional finance:

- **Bullish Optimism** characterised by expanding market capitalisation, positive funding rates, and an abundance of optimistic social chatter.
- **Bearish Pessimism** marked by sustained price declines, liquidations, and a prevalence of fear-driven narratives.
- **Consolidation or "Chop"** a sideways regime where sentiment and price repeatedly whipsaw as participants reassess direction.

Traditional toolkits that rely solely on technical chart patterns or on-chain fundamentals often fall short in anticipating these trend shifts. **Sentiment indicators bridge this gap** by quantifying the psychological component of market activity. In equity markets, the Bull-Bear Spread and Put/Call Ratios serve this purpose; in cryptocurrencies, community-favoured tools such as Fear & Greed Indices and Bull Bear Power (BBP) play a comparable role [7].

This report builds on the previous month's report, by combining **BBP** with our proprietary **Mood Index** derived from social-media sentiment to examine a bearish trend (February 2025 – April 2025). Overlaying these sentiment signals on price series for eleven large-cap altcoins allows us to investigate a central question:

How strong and consistent is the relationship between shifts in community sentiment and price movements during the bearish period?





### **Market Sentiment Indicators**

The following section maintains the same structure and level of detail as presented in the June 2025 edition of the Nodiens Market Research Report. It provides essential background on the indicators used in this analysis, ensuring context for interpreting the results.

### Nodiens Mood Index

The Nodiens Mood Index is a quantitative measure designed to capture the sentiment dynamics within cryptocurrency communities. By analyzing daily conversations from platforms like Reddit and Telegram, the index offers a real-time perspective on how users feel about specific crypto assets, helping to identify emotional extremes such as panic, euphoria, or speculative bubbles. Mood Index is built using a combination of a proprietary sentiment lexicon and advanced machine learning techniques such as Long Short-Term Memory (LSTM) networks. These tools analyze emotional undertones in user-generated content and assign confidence scores to sentiment evaluations, factoring in discussion volume, community size, activity levels, and the use of emotionally charged language, and other features. With over 10 million data points processed daily from tens of thousands of posts and comments, the index delivers a comprehensive and data-rich outlook on market sentiment. The index is updated every day using data from the previous 24 hours providing timely and actionable insights into the mood shifts that may influence crypto markets.

### Bull Bear Power (BBP) Indicator

Developed by Dr Alexander Elder, the BBP (also called "Elder-Ray") gauges whether buyers or sellers have the upper hand relative to a trend baseline. It compares intraday extremes with a 13-period exponential moving average (EMA):

**Bull Power = High - EMA** 

**Bear Power = Low - EMA** 

BBP = Bull Power + Bear Power

When BBP > 0, buyers (bulls) are driving prices above the trend; when BBP < 0, sellers (bears) are pressing prices below the trend. Because BBP incorporates both price extremes (High/Low) and the prevailing trend (EMA), it is adept at detecting momentum exhaustion and hidden bullish/bearish divergences [8]. Empirically:

- Sustained positive BBP while the EMA is rising often marks a bullish phase.
- Persistent negative BBP during a falling EMA aligns with a bearish phase.
- Rapid BBP flips around zero flag a consolidation or "choppy" market, mirroring the whipsaw conditions documented in recent sentiment-price studies [9].

These properties make BBP a practical overlay for assessing sentiment-driven shifts in crypto market momentum.





# **Crypto Total Market-Cap Index** and BBP Overlay

We anchor our macro-level sentiment analysis on the **Total Crypto Market-Cap Index** (TradingView symbol CRYPTOCAP:TOTAL). Unlike single-coin charts, this capitalisation-weighted series aggregates the dollar value of top 125 coins, offering a broad, liquidity-weighted proxy for the entire asset class [10]. Because it smooths out idiosyncratic rallies or crashes, the index is commonly used by desks to set risk limits, gauge fund flows, and benchmark performance.

To translate raw market-cap moves into a trend-strength signal, we apply the 13-day Bull Bear Power (BBP) oscillator directly to the index (Figure 1, lower panel). Treating the index level as the "price" stream allows BBP to capture whether bulls are lifting the aggregate market cap above its short-term EMA or bears are driving it below. The result is a clean, colour-coded view of regime strength that pairs naturally with our Mood Index in later sections.

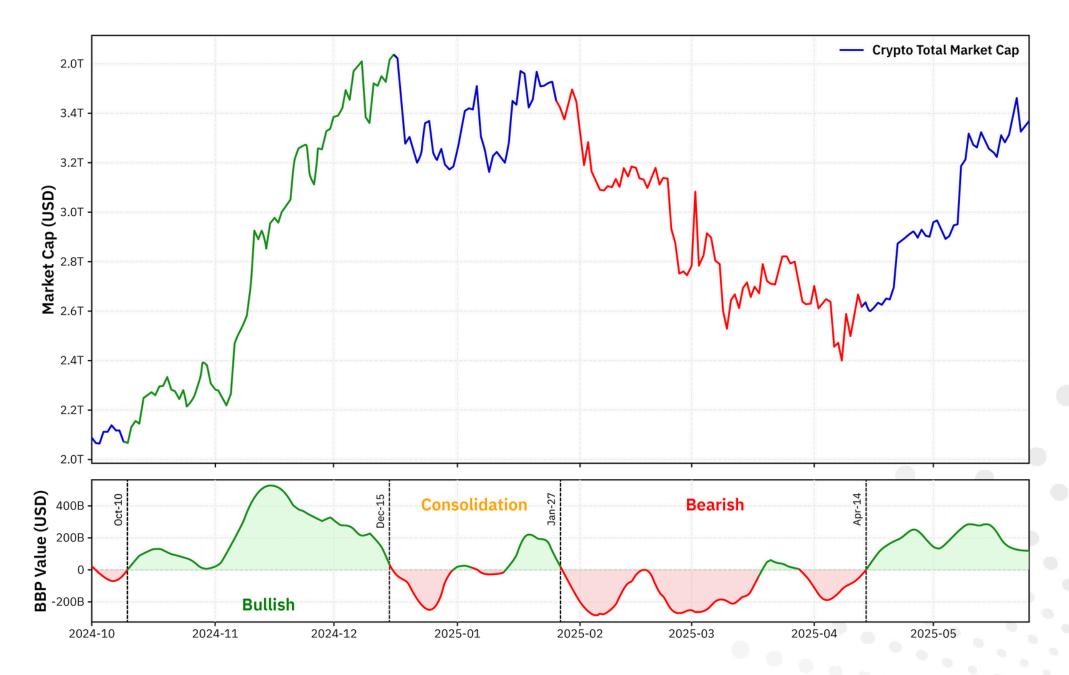


Figure 1: Total Crypto Market-Cap Index (upper panel) overlaid with Bull Bear Power indicator (lower panel) from October 2024 to May 2025.

Green/red line segments denote bullish and bearish BBP regimes; vertical dashed lines mark phase transitions used in the subsequent asset-level analysis





Using this combined lens, three distinct market phases emerge:

### • Bullish phase (10 Oct - 14 Dec 2024).

Market cap climbed from roughly \$2.2 T to \$3.6 T while BBP stayed firmly above zero, confirming sustained buyer dominance. The green shading and rising BBP curve in Figure 1 highlight this momentum burst. The analysis of this period has been the subject of the June 2025 Nodiens Market Research Report.

#### • Consolidation phase (15 Dec 2024 – 26 Jan 2025).

The index traced a broad sideways range around \$3.2 T. BBP oscillated rapidly across the zero-line, flagging whipsaw conditions and signalling that neither bulls nor bears held lasting control. This period is excluded from the current analysis.

### • Bearish phase (27 Jan – 13 Apr 2025).

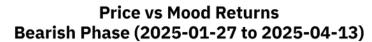
A steady draw-down to the \$2.5 T area unfolded in tandem with persistently negative BBP values and red shading—textbook confirmation of sustained selling pressure.

These marked transitions give context for the asset-level Price-vs-Mood matrices that follow: the bullish matrix samples returns during the green-shaded advance, while the bearish matrix captures performance amid the red-shaded decline. In the next section we will focus on the Bearish Period identified as per the above methodology, should you be interested in the Bullish Period analysis, please refer to the Nodiens Market Research Report from June 2025.





# Price-vs-Mood Dynamics in the Bearish Period



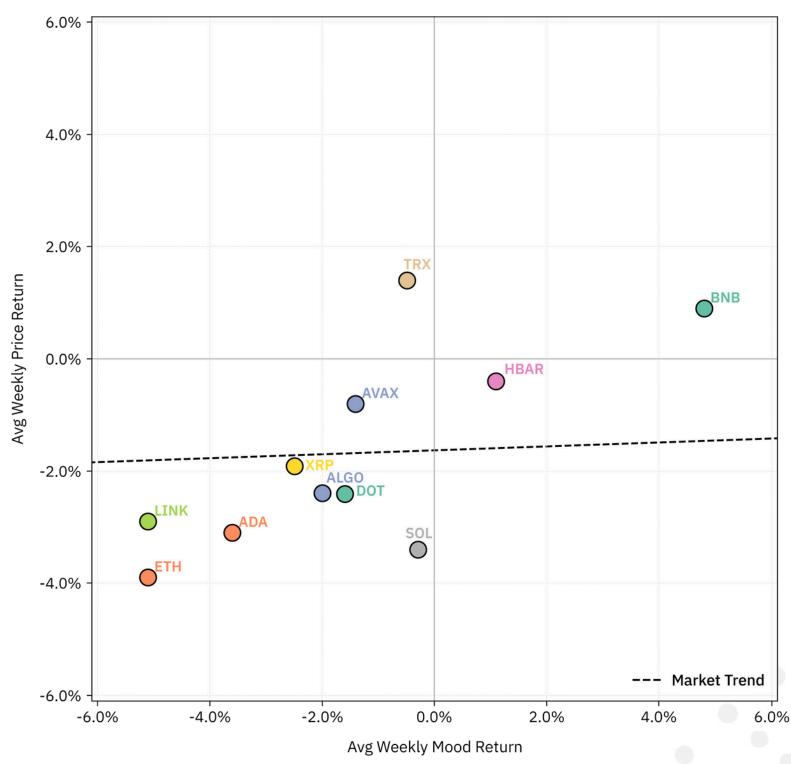


Figure 2: Matrix of average weekly price vs. mood returns for eleven large-cap altcoins during the bearish phase (27 Jan – 13 Apr 2025). Point colour reflects individual assets; the dashed line is the market-wide sentiment-price trend derived from 65 assets. Data Source: Nodiens

Figure 2 plots each asset's average weekly mood return (x-axis) against its average weekly price return (y-axis) for the bearish phase. The dashed line is an OLS regression fitted to the full universe of 65 coins.





During the ten-week downturn from 27 January to 13 April 2025, the same eleven large-cap alt-coins separate into three distinct clusters, as summarised in Table 1:

Group	Assets	Price vs. Mood	Position vs. Trend	Interpretation
Sentiment- Aligned Decliners	DOT, XRP, ADA, LINK, ETH, AVAX ALGO	Negative mood returns (≈ −1 % to − 5 %), and negative price returns (≈ −1 % to −4 %)	Majority below trend; Lower- left quadrant	Price and mood fell together, reflecting mainstream risk-off behavior. These assets moved broadly in line with prevailing crowd pessimism.
Counter-trend Movers	TRX, HBAR, BNB	Mood returns ranged from –0.5% to +4.8%, and price returns from –0.4% to +1.4%.	Well above trend; Different quadrants	Prices held steady or rose in line with a flat to positive mood, indicating defensive demand. This makes these names potential relative-strength plays during a downturn.
Under- performers	SOL	Significant price decline (–3.4%) with mood returns remaining close to zero (–0.3%).	Below trend; Lower-left quadrant	Price declines exceeded what sentiment alone would suggest.

Table 1: Classification of large-cap alt-coins by sentiment–price behaviour during the bearish phase (27 Jan – 13 Apr 2025)

### **Key Observations:**

- Most coins fell in step with pessimism. Seven of the eleven assets declined roughly in line with their negative mood readings, showing that social sentiment still influenced prices.
- **Pockets of relative strength.** BNB, TRX, and HBAR resisted the broader sell-off, finishing at or above breakeven despite a risk-off backdrop. Such resilience often points to defensive demand.
- **Notable under-performer.** SOL dropped far more than its sentiment score suggested, signalling coinspecific headwinds that sentiment gauges have yet to capture.





## Conclusion

This analysis reinforces the significance of sentiment as a driver of crypto-asset performance, even in bearish market regimes. While most large-cap coins declined in tandem with deteriorating mood, a subset—BNB, TRX, and HBAR—demonstrated resilience, suggesting that sentiment-aware screening can help identify potential relative-strength plays during downturns. Overall, the findings underscore the value of combining sentiment metrics with price dynamics to navigate shifting crypto market conditions.





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