

Trader Behavior vs Market Sentiment

Methodology

This study investigates how market sentiment influences trader behavior and performance by integrating Hyperliquid trade-level data with the Bitcoin Fear & Greed Index. To achieve this, the study computed daily aggregates for several key metrics, including Profit and Loss (PnL), volatility, trade frequency, position size, leverage, and long/short ratios. The data was aligned and cleaned to ensure consistency, employing median-based statistics to mitigate the effects of outliers. Traders were categorized into specific archetypes: High vs. Low risk exposure, Frequent vs. Infrequent trading, and Consistent vs. Inconsistent performance. Additionally, a simple predictive model was tested to classify high-risk regimes using lagged sentiment and behavioral features.

Key Insights

Fear regimes drive volatility: During periods characterized by Fear and Extreme Fear, there is a notable increase in PnL volatility and accelerated trading behaviors.

Greed regimes are more stable: These periods tend to exhibit lower volatility and steadier performance outcomes.

Means vs. Medians: The median PnL is significantly lower than the mean, suggesting that a few extreme days heavily influence the average results.

Behavior adapts to sentiment:

- **Fear:** Traders exhibit higher trade frequency, larger positions, and a pronounced long bias.
- **Greed:** There is a reduction in trading activity, with smaller positions and a short/neutral bias.

Segments matter:

- High-risk traders capture potential upsides but also face severe drawdowns.
- Frequent traders are more active during volatile regimes.
- Consistent winners consistently outperform on a risk-adjusted basis across all sentiment states.

Strategy Recommendations

Sentiment-Aware Risk Controls: It is advisable to reduce leverage and position sizes during Fear/Extreme Fear phases and tighten limits when volatility indicators rise.

Segment-Specific Strategy Design: Allow higher activity only for consistent traders and avoid applying uniform trading rules across all trader archetypes.

Use Sentiment as a Pre-Trade Filter: Treat sentiment as an early warning signal to prevent aggressive trading in high-risk regimes.

Conclusion

Market sentiment significantly amplifies trader behavior and risk exposure. Fear regimes necessitate stricter risk controls, while Greed regimes benefit from disciplined execution. By incorporating sentiment-driven filters and segment-aware strategies, traders can develop more resilient and adaptive trading frameworks.