Analysis Report: Trader Performance vs. Market Sentiment

Introduction

This report examines how Bitcoin market sentiment, measured by the Fear-Greed Index, relates to trader outcomes on the platform. Two datasets were combined: sentiment scores for various dates and detailed trade data including position size, profit/loss, and trade direction.

Data Preparation

Both datasets were scrubbed to remove inconsistencies and missing data points. Dates and times were standardized to match daily sentiment with individual trades.

Key Findings and Visualizations

Trade Volume by Market Mood

The highest trading volumes were observed during "Fear" and "Greed" periods, suggesting traders are most active when market emotions are moderately charged. Interestingly, trading tends to slow in phases of "Extreme Fear," indicating increased caution or withdrawal.

Profit & Loss Trends

Examining realized profits over time reveals heightened fluctuations during "Fear" and "Greed" environments. However, during extreme sentiment periods, profits do not consistently spike, implying that extreme market emotions do not necessarily translate to consistent gains or losses.

Average Trade Size Insights

Trade sizes swell during "Fear" phases, reflecting possibly greater conviction or risk appetite, while they fall notably during extreme emotions, which could signal trader hesitancy or protective shrinking of exposure.

Profit Distribution Overview

Profit and loss show wide variation within all sentiment groups, underscoring the unpredictability of trading outcomes regardless of market mood. This dispersion indicates traders face substantial risk even in generally positive or negative market climates.

Conclusion

- Market sentiment strongly influences trader behavior, particularly trade frequency and size.
- Extreme emotions correlate with less activity and smaller trades, hinting at cautious strategies.
- Despite sentiment swings, trading outcomes remain volatile, emphasizing the importance of risk management.
- These insights could guide sentiment-aware trading strategies that adjust exposure based on prevailing market emotions.

Supporting Visuals

All graphs showing the relationships discussed are attached separately. These visuals reinforce the observations and provide a clear picture of how sentiment and trader outcomes intersect.