Trading Report: Sentiment Analysis and Trading Performance

Introduction

This report analyzes historical trading data in conjunction with market sentiment, as measured by the Fear & Greed Index. The objective is to identify patterns in trading behaviour and outcomes under different sentiment conditions and to provide insights for developing smarter trading strategies. The analysis leverages a merged dataset containing detailed trade information and corresponding daily sentiment classifications.

Sentiment and Profitability

Periods of "Extreme Greed" demonstrate the highest average profitability and win rate among all sentiment categories. This suggests that while the market is euphoric, there's a higher likelihood of trades being profitable, although the average profit per winning trade might be smaller compared to other sentiments. "Fear" and "Greed" show moderate profitability. Interestingly, "Fear" sentiment is associated with the largest average winning trades, but also the largest average losing trades, indicating higher volatility and larger potential swings in PnL. Conversely, "Extreme Fear" and "Neutral" sentiments are linked to the lowest average profitability and lower win rates, suggesting challenging trading conditions during peak panic or periods of indecision.

Trading Direction and Sentiment

An examination of trading direction ("Buy" vs. "Sell", "Open Long" vs. "Close Long", etc.) across different sentiments reveals some behavioural tendencies. During "Extreme Greed" and "Greed," there's a slight inclination towards "Sell" or "Close Long" trades, which could be indicative of traders taking profits or attempting counter-trend shorts in potentially overextended markets. The higher win rate in "Extreme Greed" might imply successful short-term plays in these conditions. In contrast, "Extreme Fear" and "Neutral" sentiments show a tendency towards "Buy" or "Open Long" trades. However, the lower

profitability during "Extreme Fear" suggests that buying into panic might not be the most effective strategy, or that gains are smaller and harder to achieve.

Implications for Trading Strategies

Based on the analysis, adapting trading strategies to prevailing market sentiment could be beneficial:

- <u>→ Extreme Greed:</u> Given the high win rate but lower average winning trade size, focus on capturing quick profits in trending markets. Employing tighter stop-losses or slightly smaller position sizes could help manage risk during potential reversals.
- <u>→ Fear</u>: This sentiment presents higher volatility, with the potential for both large wins and losses. It might be more suitable for experienced traders comfortable with wider price swings. Strategies could involve identifying potential trend reversal points with careful risk management.
- <u>→ Extreme Fear</u>: Trading during this sentiment is challenging due to the low win rate. A defensive approach is advisable, potentially reducing trading activity or focusing on identifying strong support levels for low-risk long entries.
- → <u>Greed and Neutral</u>: These sentiments show moderate performance.

 Standard trading strategies with robust risk management are likely appropriate. Monitoring for shifts towards extreme sentiments is crucial.

Crossed Trades

The analysis indicates that "Crossed" trades (trades executed against the prevailing order book) occur frequently across all sentiment categories. While this doesn't appear to be a primary differentiator in profitability across sentiments based on this analysis alone, it highlights the importance of market order flow and liquidity dynamics in trade execution. Further analysis could explore the impact of crossed trades on execution price and slippage within each sentiment.

Conclusion

The analysis demonstrates a clear relationship between market sentiment and trading performance. Periods of "Extreme Greed" appear to be the most favorable for profitability, albeit with smaller average gains per winning trade.

"Fear" presents higher volatility and potential for larger wins and losses.

"Extreme Fear" is generally the most challenging sentiment for profitable trading. By considering market sentiment and adjusting trading strategies, including trade direction, position sizing, and risk management, traders may enhance their performance and navigate different market conditions more effectively.