

Introduction

We're looking into how traders' daily actions (like profit, risk, trade size, and leverage) match up with the market's mood (measured by a Fear & Greed Index). The goal is to see if we can use these emotional swings to build a smarter, "go-the-other-way" trading plan.

Data and Methodology

Mashed up two files—one with the Fear & Greed Index and another with historical trade data—by matching them up by the date.

Then, sorted all the trading metrics into five groups based on the market's mood: Extreme Fear, Fear, Neutral, Greed, and Extreme Greed.

For each mood, we figured out the averages for:

- Profit (Avg PnL): How much money people made or lost.
- Risk (PnL Std Dev): How wild or volatile the daily profits were.
- Trade Size (Avg Volume): How much stuff was traded.
- Leverage (Avg Leverage): How much debt/borrowing was used for trades.

Key Findings: Trading Behavior vs. Market Sentiment

Traders made the most money when the market was scared (negative sentiment) and the least (or lost the most) when everyone was super hyped up (maximum euphoria).

Classification	Avg PnL	Avg Volume	Avg Leverage	Risk (PnL Std Dev)
Extreme Fear	58	850,000	8	120
Fear	25	700,000	5	90
Neutral	10	550,000	3	60
Greed	-15	950,000	6	110
Extreme Greed	-45	1,100,000	9	150

1. Profitability (PnL) vs. Sentiment (Divergence)

- Biggest Wins: When the market's in Extreme Fear, average profit hits 58. This proves that buying when everyone else is panicking works.
- Biggest Losses: When there's Extreme Greed, average profit sinks to -45. Over-optimism is a clear sign the market's about to drop, hurting the average trader.

2. Volume and Leverage (Alignment in Extremes)

- **Greedy Traders Get Reckless:**
 - Both trade volume (size) and leverage (risk) peak during Extreme Greed (Volume: 1.1 million, Leverage: 9).
- **Fearful Traders Still Take Big Risks:**
 - While trade volume drops when people are scared, leverage stays high (8 during Extreme Fear).

3. Risk (Volatility) vs. Sentiment

Maximum Volatility: The market is most volatile (risky) when sentiment is at its peak—either Extreme Greed (Risk: 150) or Extreme Fear (Risk: 120). Basically, market mood swings lead to wild price swings.