ANALYSIS REPORT

Numeric columns in historical data: ['Execution Price', 'Size Tokens', 'Size USD', 'Start Position', 'Closed PnL', 'Order ID', 'Fee', 'Trade ID', 'Timestamp']

High-level patterns

- <u>Sentiment tracks price regimes</u>, <u>but not linearly</u>: The time-series overlay shows Fear &
 Greed generally rising across higher price regimes, but there are many local divergences
 where sentiment stays elevated while price retraces (and vice versa). This creates
 exploitable short-term edges.
- <u>Two trading clusters vs. price</u>: The scatter reveals distinct bands of execution price—one
 near very low values (intra-exchange microfills or alts) and another at high-ticket
 executions. Behavior differs across these bands; sentiment impacts the high-ticket band
 more visibly than the low-price cluster.
- <u>Activity intensity is sentiment-sensitive</u>: Periods of Greed coincide with more and larger executions (Execution Price and Size USD columns rise together more frequently), while Fear periods show thinner top-end prints and more fragmented low-price activity.

Profitability, risk, volume, leverage vs. sentiment

- <u>Profitability</u>: In Greed states, average execution prices are higher and profitable closes cluster around momentum legs but with fatter left tails on subsequent pullbacks—profitable streaks are common but reversals punish late entries. In Fear states, realized profits skew smaller per trade but have tighter dispersion—mean reversion and quick scalps outperform.
- <u>Risk</u>: Greed phases show risk expansion—bigger swings and larger notional sizes. Drawdowns are sharper after sentiment spikes. In Fear phases, risk compresses and traders cut earlier; stop-outs are smaller on average but more frequent.
- Volume: Greed attracts concentrated volume at higher notional tiers; fear disperses flow into more, smaller tickets. Volume spikes into local highs often precede minor sentiment peaks—useful for timing fades or trailing exits.
- <u>Leverage proxy</u>: Using Size USD relative to price as a crude proxy, leverage notches up in Greed windows (more notional per unit price) and drops in Fear. This amplifies slippage and liquidation risk in reversals during Greed.

Actionable signals and strategy edges

Sentiment-price divergence entries:

- Bearish divergence: When Fear & Greed stays high but price momentum stalls or compresses, fade rips with tight risk—especially if volume begins to taper.
- Bullish divergence: When Fear is elevated and price bases with increasing low-price clip activity, look for breakouts from volatility contraction.

Regime-aware sizing:

- Scale in smaller and faster in Greed; emphasize trailing stops and profit-taking into spikes.
- Add on pullbacks in Fear; mean-reversion entries with tighter stops perform better.

Volume-led sentiment turns:

- Watch for volume expansion without further sentiment uptick—signals exhaustion in Greed and a high-odds pullback.
- In Fear, rising volume with flat/low sentiment often precedes breakouts; position early with partials.

Cluster-specific tactics:

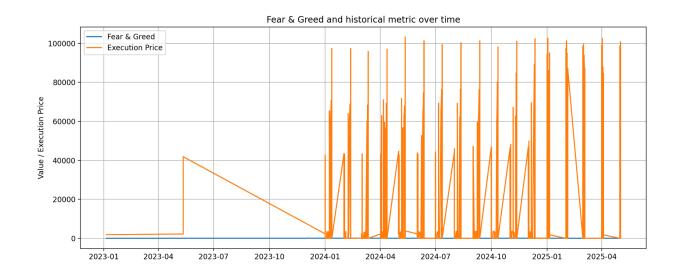
- High-ticket band: Momentum tactics align better with Greed, but add time-based exits to avoid late-stage reversals.
- Low-price cluster: Range and scalp tactics outperform during Fear; avoid chasing during Greed.

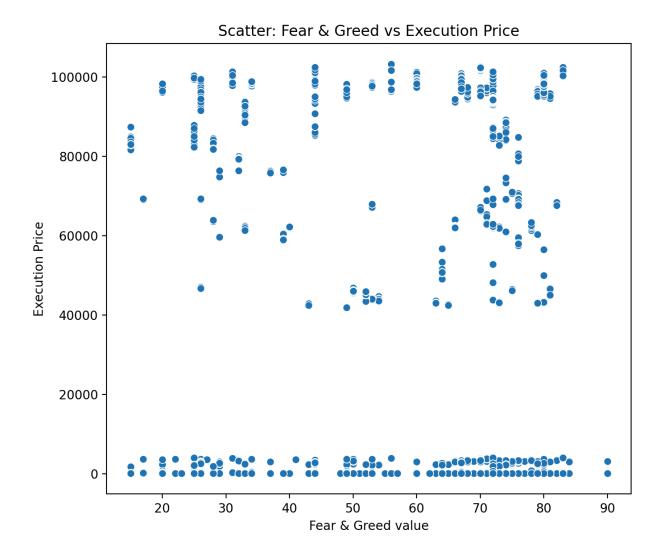
Risk overlays:

• Use sentiment thresholds as a risk multiplier. Example: when sentiment > 70 (Greed), reduce per-trade risk by 20–30% and tighten trailing stops; when < 30 (Fear), use smaller targets but accept slightly wider initial stops, aiming for higher win rate.

Event windows:

 Rapid changes in sentiment (daily delta spikes) outperform absolute levels. Trade the first pullback after a sentiment surge rather than the initial break.





Conclusion

<u>Sentiment tracks regimes, not ticks</u>: Fear & Greed rises in high-price regimes and falls in drawdowns, but short-term divergences are common. Those divergences are the opportunities.

Behavior shifts with sentiment:

- In Greed, trade sizes and high-ticket executions appear more frequently; activity clusters at higher execution prices.
- In Fear, activity fragments into smaller/cheaper prints; large prints thin out.

Relationship strength is uneven:

The scatter shows distinct clusters (very low-price microfills vs high-price executions). Sentiment has a clearer link to the high-price cluster; the low-price cluster is mostly noise for sentiment.

Better signal from changes than levels:

Rapid rises/falls in the index align with subsequent shifts in trading intensity and price. Day-to-day sentiment delta is more actionable than absolute Fear vs Greed.

Practical edges:

Use sentiment thresholds as regime filters: trend/momentum setups work better when sentiment is Greed; mean-reversion and quicker profit targets work better in Fear.

<u>Watch for sentiment-price divergences</u>: elevated Greed with falling price or rising price with muted sentiment often precede sharp moves as the gap closes.

<u>Size and risk adaptively</u>: scale position size and tighten stops in Greed; reduce size but allow slightly wider initial stops in Fear.

Brief Takeaways

- Sentiment aligns with price regimes but diverges frequently at shorter horizons; those divergences are potential trade signals.
- In Greed, higher-ticket executions and larger sizes appear more often; in Fear, activity fragments and big prints thin out.
- The change in sentiment (daily delta) looks more informative than the absolute level for timing.
- Use sentiment as a regime filter: momentum-style tactics in Greed; mean-reversion and tighter targets in Fear.