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Single Leg Option Trades Analysis

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Disclosure:

Single Leg Trades

Single Leg Trades
Data Analysis
Categorizing
Tagging Bought vs Sold
Implied Volatility Lean
Execution Analysis
Price and Volume Impact

Single Leg Trades

Trade, reported on the OPRA feed, in a call or a put option that is not tied to another option or stock leg.

We separate the single leg trades from multi legs trades and contingent trades

Data Points For Analysis

Trade Volume, Trade Count, Trade Prices

Market Bids and Offers

Trade Conditions

Exchanges

Derived Values (Implied Volatility, vega, delta, etc..)

Categorizing Trades

We can analyze the trades by categorizing them into labeled buckets for clearer evaluation

For instance Trade Size

Small- less than $10K or 10 contracts

Retail- 10K to 50K or 50 to 10 contracts

Proficient- 50K to 100K or 50 to 300 contracts

Large- More than 100K or 300 contracts

Tagging Trade Bought or Sold

Trades can be tagged such as bought or sold based on interpretations of the available data.

Each transaction inherently involves both a buyer and a seller. To determine whether the initiating order was a buy or sell, we analyze various factors including the bid-ask quotes, trade prices, sequence of trades, implied volatility, trade conditions, and the spread.

However, interpreting this data is complex and carries the risk of inaccuracies.

An order can be a marketable order, a limit order on the book, or a price-improved order in an auction. So an order can take a dealer quote or improve the market quote.

Bid Ask Implied Volatility Lean

An implied volatility (IV) lean within an options market occurs when there is a noticeable bias in the pricing of the options, which can be observed through the bid and ask prices. This lean typically indicates a buy or sell interest in an option.

Here’s how it typically manifests and can be interpreted:

Composition of Bid and Ask: The bid and ask prices of an option are influenced by a combination of dealer quotes, the limit order book, pegged and streaming or implied volatility orders.

Implied Volatility Pumps: Sometimes, traders or market makers might use an IV pump on one side or both sides of the market. The intention is to improve (better) the market and entice other participants to respond and, ideally, to attract liquidity on the opposite side.

Detecting an IV Lean

An IV lean can be detected by analyzing the relative implied volatility across the options market.

When the market is 'squeezed' on one or both sides, it suggests a presence of buying or selling interest.

Significance: By detecting a lean, we can get insights how other participants are targeting options and we may be able to improve execution quality.

Trade Execution Details

Trade Relative to Bid Ask Prices

Examples: On the bid, below the bid, near the bid, mid, on ask, above ask, near ask

Exchanges Traded

Any concentration on a single exchange, price improvements on a particular exchange

Trade Conditions

Sweeps, Price Improvements, Floor Trades

Significance: Helps analyze liquidity, price discovery and improve execution quality

Price and Volume Impact

We can combine the option volume with the implied volatility changes to determine the trade impact on the options.

Significance: The trade volume combined with IV changes can help assess if there is a shift in options premium levels, skew and IV trends.

Risks of Analyzing Single Leg Option Trades

Analyzing single leg option trades provides valuable insights, but it's important to recognize the inherent risks and limitations associated with data-driven analysis:

Misinterpretation of Data: One of the fundamental risks in analyzing single leg trades is the potential for incorrect inferences and interpretations. Data, by its nature, can be interpreted in various ways, and different analysts might draw distinct conclusions from the same dataset.

Hidden Trader Intentions: Single leg options might be used by traders as part of broader strategies such as portfolio rebalancing, hedging, or other tactical financial maneuvers. These underlying intentions or the context of the trades often remain opaque when analyzing transaction data alone. The lack of visibility into the full scope of a trader’s strategy can skew the analysis and lead to incomplete understanding.

Data Integrity Issues: The accuracy of data analysis is heavily dependent on the quality of the underlying data. Incomplete data sets, missing entries, or errors in the data can significantly distort the interpretation.

Imperfect Information: It’s important to recognize that not all relevant data may be visible or available. There may be additional undisclosed factors or hidden information that could significantly influence your interpretations.

Conclusion

Analyzing single leg option trades from various perspectives enhances our understanding of market dynamics .

Comprehensive Analysis: Single leg trades can be dissected to reveal insights about trading activity, underlying market trends, and volume breakdowns.

Informed Inferences: By leveraging detailed data, we can make inferences about trader behavior, shifts in the market, targeted options, and overall liquidity.

Enhancing Trade Execution: A deeper analysis aids in improving trade execution quality. Understanding the nuances of bid-ask spreads, implied volatility, and trader interests allows us to execute trades more effectively, improve quality of pricing and optimizing trading.

Continued Learning: Remember, the landscape of options trading is continuously evolving. Staying educated and adaptive is key to maintaining an edge in the market.