Trading Volatility:
How to Use IV Rank & Percentile for Smarter Option Strategies

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Volatility

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Historical Volatility measures how fast the underlying security has been changing in price. Historical volatility can be measured over various time frames to give the trader a sense of how volatile the underlying has been. It should be used for comparative purposes.

Implied Volatility is the options market's volatility prediction for the underlying security over the life of the option. Implied volatility provides traders with an understanding of whether current volatility is relatively high or low compared to historical volatility and past implied volatility.

Implied Volatility Ranks & Percentiles

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IV Rank

IV Rank is the at-the-money (ATM) average implied volatility relative to the highest and lowest values over the past 1-year.

If the IV Rank is 100%, it has been at its highest level over the past 1-year. An options strategy that seeks to profit from a decrease in the asset's price movement or a reduction in implied volatility (IV) may be appropriate. If the IV Rank is 0%, an options strategy that seeks to profit from an increase in the asset's price movement or implied volatility (IV) may be appropriate.

IV Percentile

IV Percentile is the percentage of days where implied volatility closed below the current at-the-money (ATM) implied volatility over the past year.

How to Apply Rank and Percentile

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- Examining the IV Rank and IV Percentile helps traders determine whether the option's implied volatility (IV) is relatively high or low, and can assist in selecting an appropriate options strategy.
- Low IVs - Consider strategies that purchase low-cost premiums. i.e., Debit Spreads, Bull Call, Bear Put, and Straddles.
- High IVs - Consider strategies that collect premiums. i.e., Naked Puts and Covered Calls, Credit Spreads such as Bull Put Spreads, Bear Call Spreads, and Strangles.
- Using chart analyses and the IV percentage performance of the underlying security can aid in selecting the most suitable strategy. Both for Directional and Non-Directional strategies.

The Effects of Implied Volatility on Options Prices

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- ***Vega*** is the change in the option's price for a 1% change in the implied volatility.

  -If the IV increases, the price of the option increases.

  -If the IV decreases, the price of the option decreases.

  All things being equal, Vega tells us how much.

- ***Delta*** is the change in the option's price for every $1 move up or down in the underlying security. Delta also represents the percentage probability that the option's strike price will expire in the money.

  -Higher implied volatility lowers the probability of an ITM strike expiring ITM, decreasing the delta.

  -Higher implied volatility increases the probability of an OTM strike expiring ITM, increasing the delta.

Final Thoughts

Implied Volatility is an essential component in determining the prices of options. Using IV Ranks and Percentiles can give the trader a relative perspective on whether the option is "cheap or expensive."

However, implied volatility is unpredictable, and determining the right strategy requires diligence regarding historical volatility, long and short-term options, and the difficulty of predicting price movements of the underlying security.

Understanding volatility and its role in trade selection play a critically important part in one's overall trading strategy; something volatility traders would certainly agree with.

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