

Kase's Natural Gas Hedge Report

Introduction

Kase's Quarterly Hedge Report provides hedgers with a market forecast and analysis brought together with specific tactical recommendations for both producers and consumers, including points at which to hedge, what instruments to use, how much to hedge, etc. In-depth statistical research studies and stress testing (Monte Carlo simulations) identify for hedgers the probabilities of the levels to which prices may move over the next quarter under a wide variety of market expectations.

The Quarterly Hedge Report is issued mid-month prior to the quarter for which it is written and consists of the following sections:

- I. Outlook for the First Nearby Contract and the Three, Six, and Twelve-Month Strips
- II. Recommendations on Hedging Strategy for Upcoming Quarter
- III. FAS 133 Correlation Analysis and Basis Review for all Inside Ferc Pipelines
- IV. Review of Actions Taken and Results from Last Quarter
- V. Monte Carlo Simulations for Forward Pricing
- VI. Statistical Appendices for Price and Volatility

Outlook

- ◆ Recap of Results of Last Quarter's Forecast
- ◆ Outlook for Forthcoming Quarter
- ◆ Important Check Points
- ◆ Alternate Scenario and Odds

In this section, a thorough analysis and forecast for the perpetual (first nearby) contract and the three, six, and twelve-month strips is presented. A comprehensive examination is provided on market view, while patterns, formations, and reversal signs are analyzed. Kase's deductions, biases, short and long term targets, and important decision points are also given.

Targets are determined using traditional technical forecasting techniques such as wave patterns, retracements and expansions, and point and figure charts combined with judgment based on decades of experience in the energy market.

Recommendations for Upcoming Quarter

- ◆ Tactical Recommendations on Fixing Forward, Collars, and Options
- ◆ Inputs to the Model
- ◆ Numerical Values of All Targets
- ◆ Statistical Reversal Values
- ◆ Computer Screen Shots

This section provides specific tactical recommendations for the upcoming quarter. Here the settings (inputs) to the model, which best suits the outlook, are given, along with an explanation of the rationale behind the selection. Special circumstances to watch for and changes to the hedging strategy, which may be called for, accordingly, are discussed.

Other statistical information that is helpful in the use of the model is also provided. In addition, the numeric values of all the components of the model are published along with screen shots. If the settings have been input into the computer without error, then the numerical value of the hedge targets will match those published.

Correlation Analysis and Basis Review

This service provides a means to measure the effectiveness of a hedge. Descriptive statistics on the R^2 and its percentile rankings are given, as well as a three-year historical table showing the R^2 and 12 and 30-point slope and F-Statistics. The raw data used in the study is also provided along with pipeline-to-pipeline analysis. This service provides the risk manager with information essential to making the decision as to whether to hedge in the underlying index (the pipeline itself) or NYMEX, and if the latter decision is made to assess the risk associated with the decision. Also provided is information on what the basis has been for a particular pipeline over the past three years, the change in basis from month to month, and percentile rankings. Thus, it is possible to discern whether the current basis is favorable or unfavorable.

Review of Strategies

This section documents the performance of the HedgeModel combined with the recommendations given for producers and consumers. Both the track record of those who have been following the Kase approach all along, as well as those just commencing the previous quarter, are evaluated.

For each category, activity is documented and priced, day-to-day, in detail, showing the action that hedgers might have taken (date, price, instrument, amount) and explaining why. A mark-to-market for both producers and consumers is also published here.

Monte Carlo Simulation

Monte Carlo simulations are used to forecast future prices of a commodity based on various market expectations. To be able to develop price distributions into the future it is necessary to compute the appropriate bias (degree of trendiness) and volatility values. Kase has developed a unique, proprietary process for choosing these critical levels for individual contract months or spot physical as well as forward curves. The proper inputs for the prompt month and the three, six, nine, and twelve-month strips are then run through extensive Monte Carlo simulations for seven market expectations from highly bullish to highly bearish. These simulations provide extensive data in chart and numeric format for the probabilistic outcomes for price for the next quarter. The simulations can be used to confirm forecasts developed by other techniques and also for value or profit at risk measurements.

Statistical Appendix

- ◆ Statistical Study, Price
- ◆ Statistical Study, Volatility
- ◆ Zone Study

The statistical appendix provides analysis in the form of tables and charts of various aspects of market characteristics, such as price, volatility, and spreads. The appendix also provides tables containing the average, mean, median, and standard deviation, skew of the characteristic in question, as well as percentile rankings. Usually such information is given every quarter for the first nearby contract and the strips. Other data, such as that on volatility and spreads are provided on rotation. These appendices allow the user to gain a clear knowledge of market structure and character.

Each report contains the detailed appendices for the special studies presented in Section III. Both for informational purposes as well as to authenticate our work, all of the detailed background documentation for our studies is published. Previous reports have included studied strip volatility, many types of spreads, seasonality studies, and arbitrage evaluations.

No Charge Trial

For a six-week, no charge trial of the Kase Quarterly Hedge Report, contact us at kase@kaseco.com.