



# Technical Analysis of Commodity Markets: Emphasis on Bar Charts

## Curriculum Guide

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### I. Goals and Objectives

- A. To improve the effectiveness of producer's price

### II. Descriptions/Highlights

- B. Profitability is tied closely to the effectiveness of price risk management decisions at the farm level. Two important components of that effectiveness are the timing of decisions and the price levels at which actions are taken.
- C. Most analysts stress the importance of technical analysis in the timing of decisions, and the point is valid. Fundamental analysis is completed initially to form expectations in terms of the likely direction of price movement from current price levels and the possible range within which prices might move during the decision period. Then, technical analysis is used to "time" decisions made predominately on the basis of fundamental analysis. The level at which orders are placed in the market is also very important.
- D. Consider the important issues surrounding the December corn chart in Figure 6 of the publication. A producer who, around July 1, starts to believe that growing period weather in July is likely to be near normal might decide to sell December futures at \$2.80. Alternatively, he might ask the local elevator to "book" corn if the elevator can offer a cash forward contract for harvest delivery at \$2.60. Assume the local harvest period basis is  $-\$.20$ , suggesting \$2.80 in futures is equal to \$2.60 in the cash forward contract market.
- E. The effective cash price of \$2.60 might have been generated by adding some margin to budgeted costs, or it might be budgeted production costs plus family living expenses prorated across the bushels of corn to be sold. It looks quite logical, but there is a potentially major problem: The price level is not likely to be reached. Note the early July rally would have to carry through the chart gap (which is resistance) *and* through the late June high near \$2.70. Unless a significant weather problem develops, such an extended and sustained price rally would be very unlikely.
- F. The timing, making a decision around July 1, might be effective. But the level of price selected is not likely to be effective. Thus, it appears timing of action and price level at which action will be taken flow logically from the technical patterns on the chart. The \$2.80 might appear to be reachable and within the probable price range determined by fundamental analysis, but the technical message of the recent market actions is that \$2.80 is not likely to be reached.

- G. Understanding some of these chart basics can bring order and predictability to these markets that producers will not otherwise see. Understanding that sell orders will be distributed around resistance planes, especially at the life-of-contract high, helps clarify why the market does not make the new highs producers always like to see. And they will come to see why a 70-80 percent chance of selling December corn futures at \$2.60, in the corn example, might be far superior to the 5-10 percent chance of selling at \$2.80. From a July 1 vantage point, the chart suggests going for the \$2.60.
- H. When orders are placed just below a resistance plane on a good-til-cancelled (GTC) basis, the exact timing of the placing of a hedge is yet to be determined. But when the market closes below a trend line, the issue is joined quickly – the producer needs to act immediately. The *when* is the day the close is recorded below the line. The *price level* will be jointly determined by the type of order used.
- I. A sell-stop order moved up periodically and maintained just below the trend line becomes a market order when touched from above. It will be filled at or near the price level in the sell-stop order unless this is a very thin market (a relatively new futures or a distant month with little trade.) On some exchanges, *sell-stop-close-only* orders will be accepted on some commodities. The order is filled at the closing price level only if the close is at or below the level specified in the order. (Ask the broker about availability of this order.) The advantage is that a short position is not established if the market dips to the order price level and then closes back above the trend line. A sell-stop order would be filled if touched even if the close is well above the trend line.
- J. The relative strength index is beneficial in bringing some discipline to the program and avoiding panicky selling on the lows. Many producers are more likely to get pressured into pricing at or near the lows when their cash flow position is threatened than to price on an “up” market that is approaching resistance planes. Seeing the RSI at overbought levels will help bring the discipline to sell near the price highs. Seeing the RSI at oversold levels when prices are low, suggesting a rally is imminent, helps bring discipline to these situations and panicky selling is avoided.
- K. Paying attention to chart signals can help your price risk management program be effective. The objective calling for “improvement” can be reached. Being able to read the charts also brings an impression of order and logic into what many producers initially see as a chaotic futures market. That change is likely to lead to changed behavior as producers start to pay more attention to marketing and managing their exposure to price risk.

### **III. Potential Speakers**

- A. Commodity Broker
- B. Extension Economist

## IV. Review Questions

- A. How would you determine where to draw a trend line?

Answer: Draw a line connecting two price lows in a rising market or two price highs in a declining market, with the two points preferably at least 10 trading days apart.

- B. When a market corrects or retraces part of a move, what are three common percentage levels where the correction could run out of steam?

Answer: 38, 50, 62 percent

## V. For More Details

Purcell, Wayne D. Managing Price Risk in Ag Commodity Markets. Farm Business Management Series, Deere & Company, Moline, Illinois, 1997.

Purcell, Wayne D. and Stephen R. Koontz. Agriculture Futures and Options: Principles and Strategies, Prentice Hall, Upper Saddle River, New Jersey, 1999.

Schwager, Jack D. Technical Analysis, John Wiley & Sons, Inc., USA, 1996.



## ● Managing Orders: Life of Contract High Resistance

The price rallies toward life-of-contract price highs bring huge opportunities. But, they can be accompanied by some difficult decision situations for the producer. Some guidelines are in order.

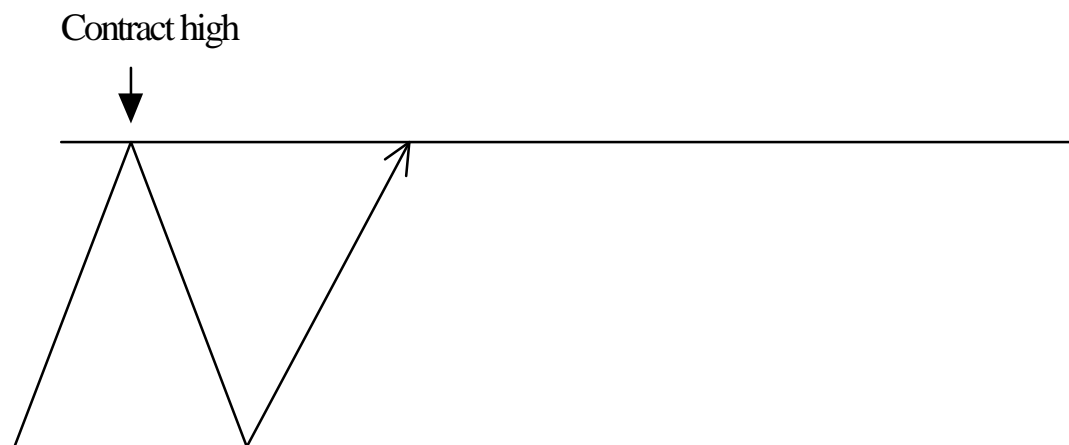




### ● Managing Orders: Life of Contract High Resistance (continued)

If the second surge pushes up through the old contract high, follow these rules:

Buy back short positions at the second close if there are two consecutive closes above the old high. The market is likely to go significantly higher because something in the supply-demand balance has turned more positive. Two consecutive closes at new price highs is a widely monitored “buy signal.”

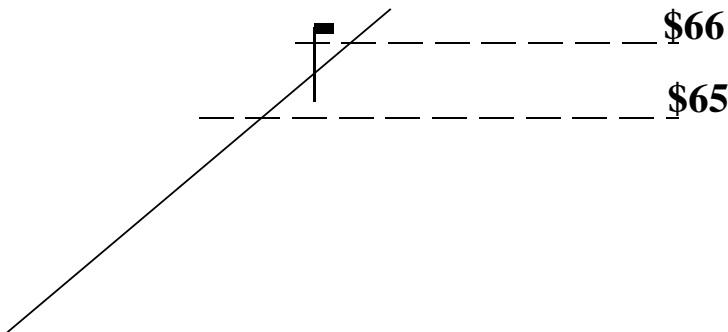




● **Managing Orders: Life of Contract High Resistance (continued)**

Place a sell order just below the old high. There will be a distribution of sell orders at and just below the resistance plane, and the selling pressure will usually turn the market back at prices below the plane. Sell orders a bit below the plane have a higher probability of being filled.

● **Managing Orders: Trend Line**



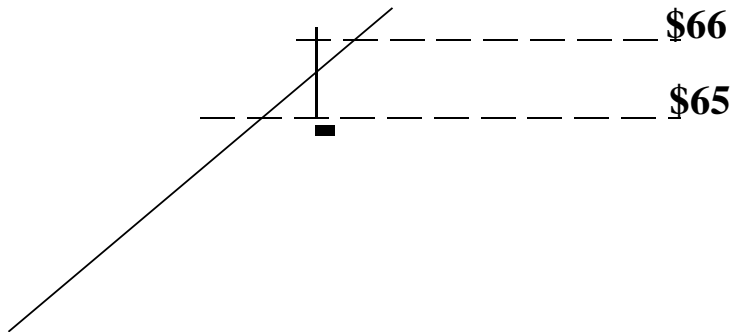
A sell stop at \$65.50 just under the trend line will be filled near \$65.50 even though the close is back above the trend line at \$66.10. A sell-stop-close-only order\* would not have been filled. With this strong close, a cattle feeder probably would prefer not to be in short hedges. A "sell-stop-close-only" order would not result in being short, but it too has its disadvantages.

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\* Check with your broker or exchange to see if this order is accepted on the commodity of interest.



## ! Managing Orders: Trend Line



A sell-stop at \$65.50 would have been filled near \$65.50. A sell-stop-close-only order at \$65.50 would have been filled at the close or some \$64.80. This is an obvious disadvantage to the "close only" order.



### ! Useful Order Details

- GTC = good 'til cancelled. Add to an order and it will not be treated as a "day order" and cancelled at the end of the day.
- OCO = one cancels the other. Use with a sale order above the market looking to price on a rally and a sell-stop below the market as a "safety net." When one order is filled, the other is cancelled.
- MIT = market if touched. Added to a limit or specific price order to sell, the order converts to a market order if the level is touched and ensures a fill. The fill may not be exactly at the price level specified in the order.
- Limit = a constraint on an order. For example, a limit can be placed on a sell-stop order to constrain how low you are willing to accept a "fill."

Talk to your broker about types of orders and modifications.