

COLORADO STATE UNIVERSITY
DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

Problem Set 4
Fall 2023

Agricultural and Resource Economics 412
Agricultural Commodities Marketing

S.R. Koontz

Technical Analysis and Pricing Decisions

This problem set is to be an independent effort by a team of two students. Write both names and student ID numbers in the top right-hand corner. Partial credit will be awarded only if you show your work and if the work communicates. Show any necessary work carefully on each chart. Remember, good work communicates. This problem set is worth 50 points.

The purpose of this problem set is for you to gain some experience performing technical analysis on bar charts and in using charts to make trading decisions. The objective is to identify technical patterns and signals as they occur over the trading horizon of a futures contract and then discuss the technical situation at the end of the presented price information. Attached to the end of this problem set are three charts: Feeder Cattle Weekly Nearest Contract prices as of November 7, 2023, the MAR 2024 Sugar Contract as of November 7, 2023, and the FEB 2024 Lean Hog contract as of November 7, 2023. Make any necessary drawings on the charts and label the formation with the letter associated with the question.

1. Using the Weekly-Nearest Feeder Cattle Contract prices answer the following.
 - a. Draw and identify the (long-term) downtrend formed in mid-2015.
 - b. Draw and identify the (short-term) downtrend formed after mid-2015. (Yes, it is too steep but...) Redraw if necessary.
 - c. Look ahead in the price history. Both trend lines are broken. When and what are the signals?
 - d. Draw and identify the support plane formed in late-2015. What is the price level? Does it hold?
 - e. Draw and identify the support plane formed in late-2016. What is the price level? Does it hold?
 - f. Draw and identify the resistance plane formed in early-to-mid-2017. What is the price level? Does it hold?
 - g. Draw and identify the resistance plane closest to the most recent price. What is the price level?
 - h. Draw and identify the support plane closest to the most recent price. What is the price level?

- i. What does the technical picture communicate about the direction of feeder cattle price movements? Do you have recommendations? (Correct answers use technical information.)
-
2. Using the MAR24 Sugar (SBH24) chart answer the following.
 - a. Draw the resistance plane established before January 2023. Draw the support plane established before January 2023. What are the price levels?
 - b. Draw and identify the long-term uptrend formed in January 2023. (The first low is in October 2022.)
 - c. A short-term uptrend is formed in late-March 2023. Draw and identify.
 - d. Draw and identify resistance formed in March 2023. What is the price level?
 - e. In late March 2023, the market provides two signals. What are these?
 - f. Draw and identify the resistance formed in April 2023. What is the price level? Discuss the market reaction to that resistance in May and June.
 - g. Notice and redraw the new short-term uptrend reformed in June 2023. When was the original short-term trend broken and what was the signal?
 - h. What happens as the market approaches the short-term uptrend in August?
 - i. What happens to resistance in September? When and what is the signal?

- j. Make a trading recommendation. What action would you recommend following what specific signals? Be complete. If you want me to wait, you must me for what, because you must commit.
-
- 3. Using the FEB24 Lean Hog (HEG24) chart answer the following.
 - a. Draw and identify support plane formed in December 2022. What is the price level?
 - b. Draw and identify resistance plane formed in October 2022. What is the price level?
 - c. Describe what happens to the resistance plane and support plane in 2023? What is the signal?
 - d. Draw and identify the downtrend formed in early May 2023.
 - e. Draw and identify support plane formed in March 2023. What is the price level?
 - f. Discuss the market reactions to the trend line and support plane in May and June. Are there clear signals or false signals?
 - g. May and June was a tough trading window. Take a break until August. What are the two main technical patterns to be looking at in August?
 - h. Discuss the market's reaction to support in October. What's the signal? Is it confirmed? (And sound familiar?) What is the technical pattern that is driving this market?

- i. Draw and identify on the chart a clear consolidation pattern. When and what is it? What is the signal?
- j. Draw and identify on the chart a clear topping or bottoming pattern. When and what is it? What is the signal?
- k. Make trading recommendations given the current technical picture. Assume I have no position. (Do not worry that this contract is expiring soon as similar technical patterns are on deferred contracts.) What action would you recommend following what signals? Be complete. Use the current technical picture and use multiple signals if possible. If you want me to wait, you then tell me for what, because you must commit. Finally, recommend an exit strategy: upon what signal would you look to exit and take a loss and upon what should I exit and take profits or know that I have a good initial position. Is there any other information that I should consider?

GF - Feeder Cattle - Weekly Nearest OHLC Chart



SBH24 - Sugar #11 - Daily OHLC Chart



HEG24 - Lean Hogs - Daily OHLC Chart

