

Agricultural Commodity Marketing: Futures, Options, Insurance

# Technical Analysis

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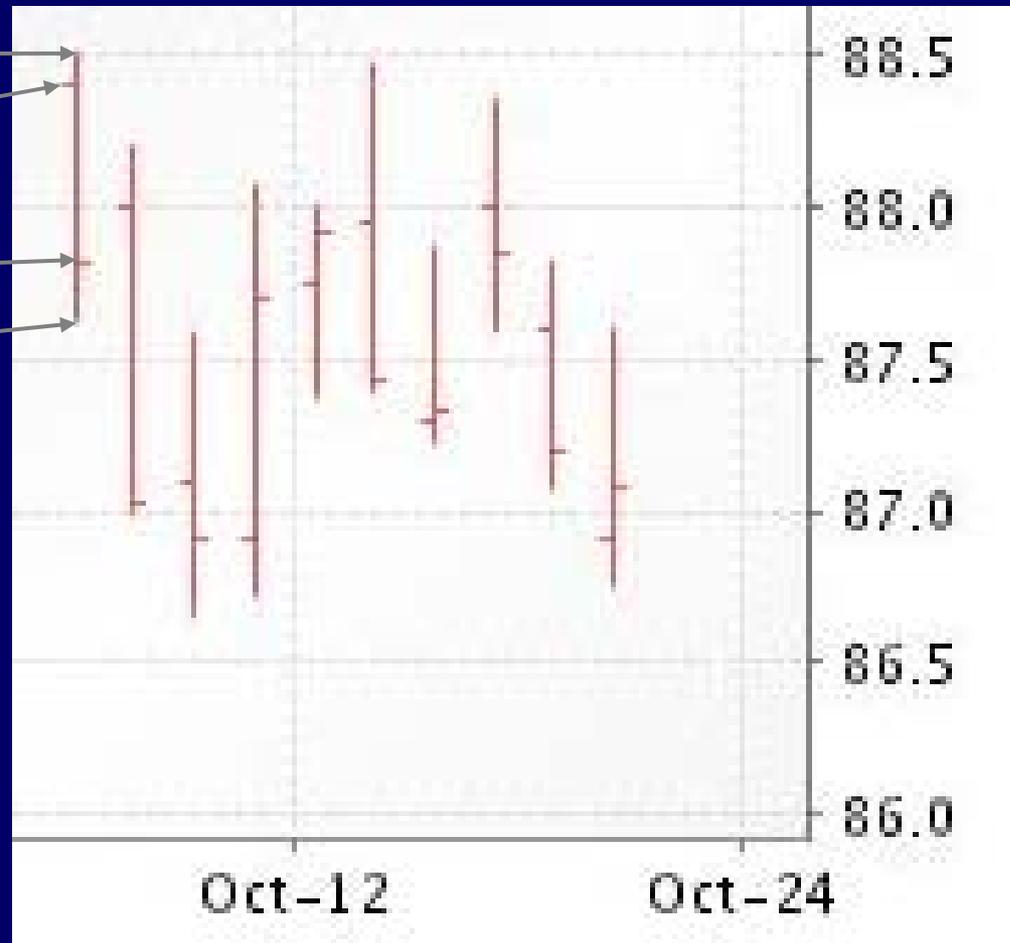
# Outline

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- Bar Charts
- Moving Averages

# Bar Chart Information

- High
- Open
- Close
- Low
  
- Daily
- Weekly
- Monthly



# Chart formations

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- Trends
- Planes
  - Other top and bottom formations
  - Key Reversals
  - Flags, Triangles and Pennants
  - Gaps

# Up Trend

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- Connect two or more daily price lows
  - Preferably 10 days apart
- When market closes below an uptrend line, a sell signal is generated
- Computer trading vs fundamental
  - Computers may drive prices lower for a few days
  - If fundamentals don't support this, then prices will rally

# Up Trend



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# Down Trend

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- Connect two or more daily price highs
  - Preferably 10 days apart
- When market closes above a down-trend line, a buy signal is generated
- Computer trading vs fundamental
  - Computers may drive prices higher for a few days
  - If fundamentals don't support this, then prices will decline

# Down Trend



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# Trend line market signals

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- Speculators
  - Buy and sell based on signals
- Hedgers – Short
  - Place on sell signal
  - May choose to offset on buy signal
- Hedgers – Long
  - Place on buy signal
  - May choose to offset on sell signal

# Trend Line reliability

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- A close above a major down trend or below a major up trend will lead to a significant price move about 75% of the time

# Resistant Planes

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- Life-of-contract highs can be very difficult for market to penetrate
- Strong Fundamental conditions needed to move market above resistance
- Sell signal if market fails to take out resistance
- Buy signal if market closes above resistance (particularly 2 closes above)

# Resistant Planes

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- There are also intermediate resistance planes
- These are not as hard to penetrate as life-of-contract highs are

# Resistance plane



# Resistance plane



# Support Planes

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- The mirror image of Resistance Planes
- Life-of-contract lows
- Buy signal if market fails to penetrate
- Sell signal if low is taken out

# Support Planes



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# Hedgers and Technical Analysis

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- If understand trends and support and resistance planes:
  - Time placement of hedge
  - Set realistic market targets
  - Perhaps minimize margin calls

# Moving Averages

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- May be a compliment to bar chart
  - Single Moving Average 40-day
  - Help signal turning points in market
- May be an alternative to bar chart
  - Two moving averages employed
  - Example 3-day and 10-day
  - Example 9-day and 18-day
  - Sell signal when shorter cuts longer from top
  - Buy signal when shorter cuts longer from bottom

Buy B and Sell S  
Signals using the  
4-day & 9-day  
Moving Average



# Moving Averages

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- Advantages
  - Provide clear market signals
  - No guessing as to chart formation
  - Good if there are trends in the data
- Disadvantage
  - May generate multiple trades
  - Don't perform well in choppy (sideways) markets

# Moving Average

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- Short Hedgers
  - Place on Sell signals
  - Lift (offset) on Buy signals
- Long Hedgers
  - Place on Buy signals
  - Lift (offset) on Sell signals
- Speculators
  - Buy and Sell and Offset on all signals

# Technical Analysis Summary

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- Technical Analysis does work
- It requires Work to make it work
- Need to study past technical analysis for several years worth of data on a particularly commodity before trading
- For hedgers
  - Trends and Support/Resistance Planes
  - Moving Averages