

Price Forecasting

Technical Analysis

There are an infinite number of ways to measure past price performance

- ◆ Bar Charts
- ◆ Lines of Support and Resistance
- ◆ Consolidation Planes
- ◆ Key Reversals
- ◆ Price Gaps
- ◆ Moving Averages

Technical Analysis

Technical analysts assess commodity price implications by evaluating past prices and market activity (trade volume and open interest).

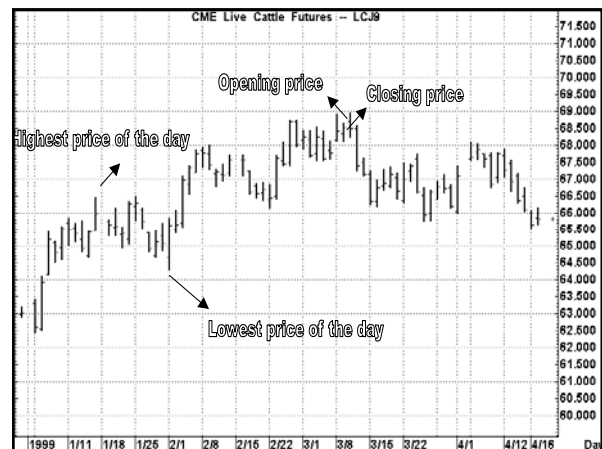
Bar Chart

- ◆ Price is plotted on the vertical axis
- ◆ A time interval is plotted on the horizontal axis
- ◆ The bar chart plots the range of price experience over the time interval

Strategy

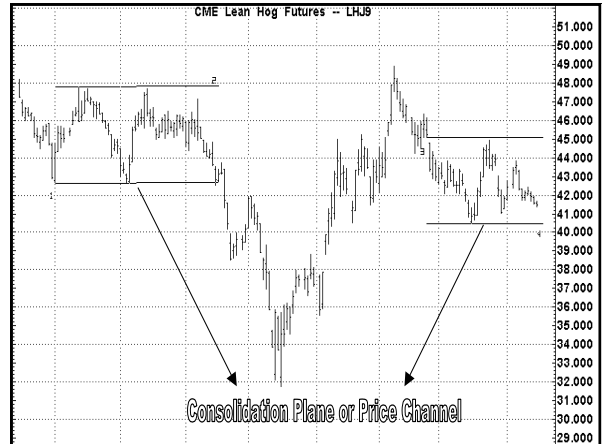
Using past prices and market activity levels, predict the (usually) short-run variations in price.

The result is a short-run approach to price forecasting. It addresses the question "how will we get to the market equilibrium price?"



Trend Lines

- ◆ Used to get more specific information from a bar chart. Estimates the exact price at which a trend reverses.

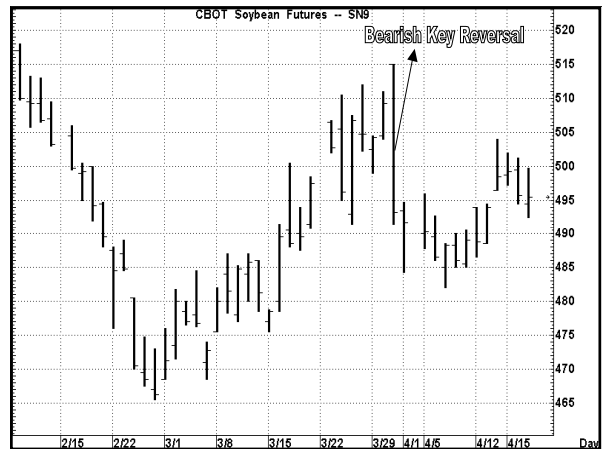


Key Reversal

Indicates a change in trend. Also called an outside day because the extreme price (high and low) are both outside the previous day's trading range.

Consolidation Planes

- ◆ Identifies an expected trading range when no trend is present (sideways market). Traders buy at the bottom and sell at the top of the range until the pattern is violated.



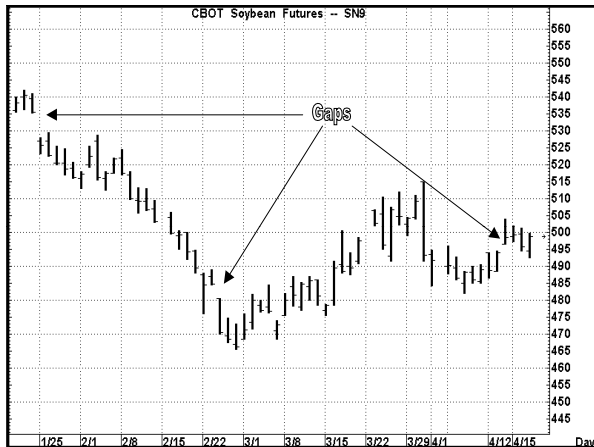
Gaps

Reflects a strong change in the supply/demand assessment of the market, or a change in the general interpretation of existing market information.

Two interpretations:
run from the gap
fill the gap

RSI

- ◆ The relative strength index has a maximum of 100, and a minimum of 0. If the RSI is 50, the market is in neutral. Above 50, the market is going forward (higher), below 50 the market is going in reverse (lower). If the absolute value of the RSI increases from 1 day to the next, the market is accelerating.

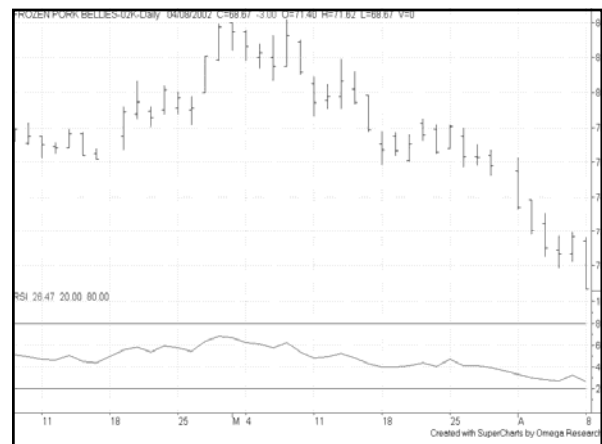


RSI Formula

- ◆ Record last 14 days price changes based on closing prices.
- ◆ Sum negative changes and sum positive changes. Divide each by 14.
- ◆ $RSI = (Avg. U) / (Avg. U + Avg. D) * 100$

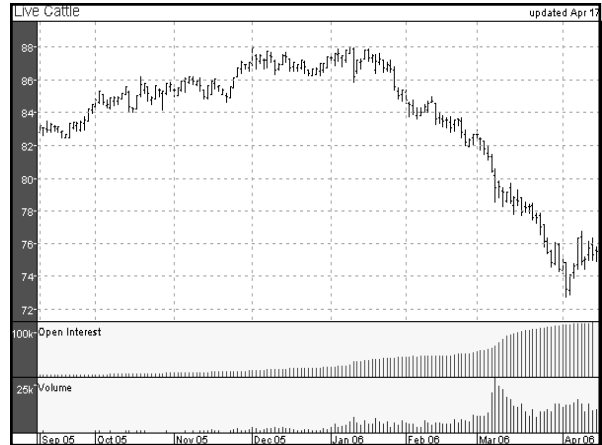
Relative Strength Index

- ◆ Attempts to measure the momentum indicated in the current price trend.
- ◆ RSI is calculated over some time period (often 9 or 14 days) and indicated the direction and rate of change in market speed.



Moving Averages

Attempt to smooth out daily price fluctuations so an analyst might get a better idea of the underlying trend. Trading signals are generated when prices cross the moving average.



Summary

Technical analysis can be a powerful tool in picking market entry and exit points, but:

- Selecting the time frame over which an indicator is generated is completely arbitrary BUT critical. In general, the longer the time frame the accurate the signal, but the less often there will be a signal.
- Technical rules can be self-fulfilling which is NOT indicative of some irreversible market rule.
- Most technical traders look at a whole portfolio of indicators. Focusing on just one is extremely dangerous.



