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Using the RSI and Other Oscillators to Analyze the Market

This eighth of nine NebGuides on effective use of technical indicators in market analysis explains Relative Strength Index (RSI) and Stochastic oscillators.

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Stochastic oscillators are called oscillators because they form a band across the bottom of a chart with a line that moves, or oscillates, above and below a midpoint.

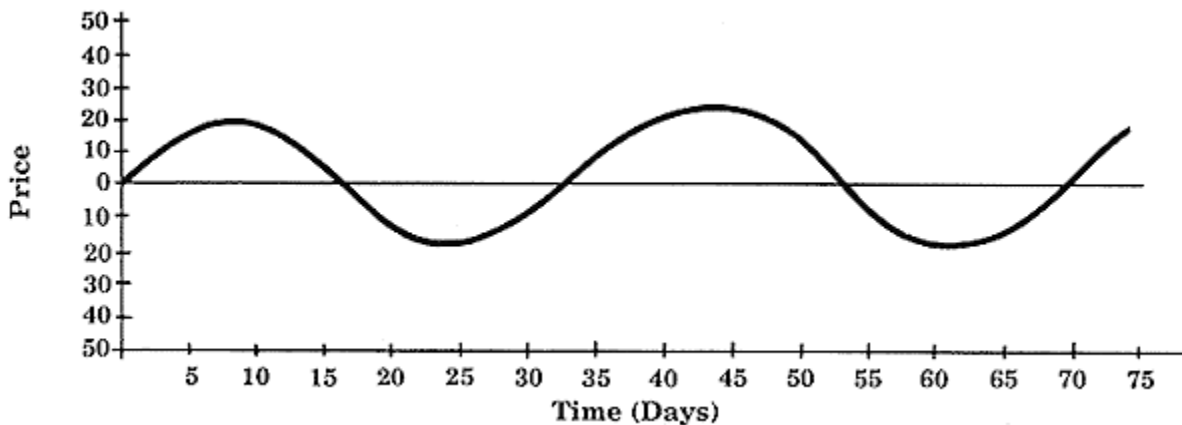


Figure 1.

Because an established trend line tends to continue indefinitely, it often is a reliable indicator of future prices. During market price uptrends, a producer wants to own grain that is increasing in value. In downtrends, investors are slow to invest money and quick to protect it.

Oscillators are a market indicator that can predict when a producer should sell grain increasing in value and hold grain that is not.

In an uptrend's early stages, prices move steadily upward. As the trend continues, prices begin to move more rapidly as larger numbers of traders--expecting prices to continue to increase--jump into the market.

Then, however, prices lose momentum as too few buyers are willing to pay higher prices. The prices move more slowly while holders of rights to receive a commodity (longs) stay in the market to reap further price increases, while other traders leave the market.

Finally exhausted, the prices stop moving up and turn downward. The downtrend produces a similar pattern, but it may be steeper than in the uptrend. If traders know when prices are losing momentum, they probably can respond to that reversal signal to increase their profitability position. In most cases, producers can forecast the end of the trend by plotting the changing movement of the market.

In short, *oscillators are designed to measure the underlying strength of a price movement in the market.* They measure changes in price rather than just the price level. This is done by measuring the distance of a price change within a time period and assessing if it is significant enough to signal the trader to take market action.

Oscillators usually are used in conjunction with other trend analysis tools. They are most valuable in a non-trending market with prices fluctuating within a trading range.

All oscillators have similar charts. There is a base at the bottom and a midline around which the prices oscillate. Good charts can provide valuable information to the trader, but by themselves do not yield enough clues to ensure good trades. Successful traders must know how to get into and out of the market at the right time to catch the move they are looking for. Several types of oscillators are available to help traders measure the timing for trades. The Relative Strength Index (RSI) and a Stochastic oscillator are among those most frequently used.

RSI

The RSI looks at the average of the up closes and the average of the down closes for a given period. A 14-day segment is commonly used, but the user may select the number of days.

The RSI attempts to identify overbought and oversold markets running out of momentum. A standard scale of zero to 100 is used. The RSI uses an exponential moving average smooths out inconsistent movement and gives the most weight to recent data while not eliminating the old data.

A producer needs to think about the degree of sensitivity desired when he or she chooses boundary lines. These lines represent overbought and oversold conditions. When the RSI crosses these lines, it indicates the market is losing strength and probably will change direction.

Many traders use the 70 line for the upper and the 30 line for the lower boundary, but some feel this range is too sensitive. Producers commonly use upper and lower boundaries of 65 and 35, respectively (*See Figure 2*).

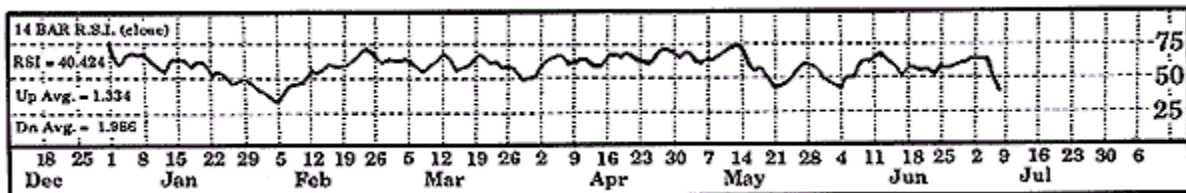


Figure 2.

The RSI is a leading indicator. Its highs and lows normally precede market tops and bottoms. It confirms changes in momentum, especially fading momentum, signaling an imminent change in market direction. The RSI also alerts the investor to periods of recent price movement that include insignificant true market movement.

Consistent use of the RSI shows long term trend formations similar to bar chart formations. With a little thought and effort, producers can draw support and resistance lines.

Again: producers should watch for the RSI to change price direction as a strong signal of market change.

Other Oscillators

Stochastic oscillators forecast market changes by measuring the relative position of the closing price within the daily price range.

For example, while buyers in a **bull market** are stronger than sellers and push prices up at the end of the trading day, this pattern weakens toward the end of a trend. If the market prices continue to go up but the closing price is moving toward the low end of the price range, the trader should watch for changing markets.

A **bear market** will see a similar pattern in reverse. When reading the charts, the overbought conditions are indicated near the top of the chart's range while the oversold conditions are near the bottom of the range.

To calculate the Stochastic indicator, subtract the total of the lows for 14 days from the last day's close. Subtract the total of the lows for the same 14 days from the total of the highs for the same 14 days. Divide the first number by the second. This number is then plotted on the graph.

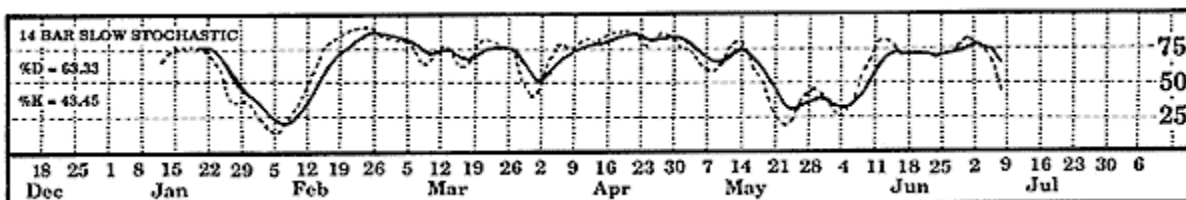


Figure 3.

Many chart services carry the Stochastic graph at the bottom of their daily activity chart. These patterns usually have been smoothed out by using a moving average of raw Stochastic data. Producers using charting services need to check their publications for the exact calculation of this oscillator.

Conclusion

Oscillators rarely are used alone as a market analysis tool. Each trader should develop a personalized combination of marketing tools that may well include oscillators. The producer's needs and time limitations are valid considerations. Producers who consider using the RSI or any of the other oscillators should think about subscribing to a charting service. The time saved may be well worth the expense.

Profitability is the ultimate test of any chosen combination of marketing tools. The trader using oscillators must remember that if prices gain too much velocity, the prices probably will become overextended and change direction.

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