Three Line Break Charts



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Introduction

Invented in Japan, Three Line Break charts ignore time and only change when prices move a certain amount. In this regard, these charts are quite similar to Point & Figure charts. Three Line Break charts show a series of vertical white and black lines. White lines represent rising prices, while black lines portray falling prices. Prices continue in the same direction until a reversal is warranted. A reversal occurs when the closing price exceeds the high or low of the prior two lines.

Construction

Before looking at construction details, a couple of clarifications are in order. First, the black and white bars on the price chart are called "lines". Second, line changes are based on closing prices, not the high-low range. Third, Three Line Break charts evolve based on price, not time. The first chart below shows 85 candlesticks or trading days from March 21st until July 20th. A Three Line Break chart condenses this price action into 44 black and white lines. This technique filters the noise to focus only on price movements that are deemed significant.





Two Line Reversals

Each new closing price produces three possibilities.

- A new line of the same color is drawn when the price extends in the same direction.
- A new line in the opposite color is drawn when the price change is enough to warrant a reversal.
- No new lines are added when price does not extend the trend or the change is not enough to warrant a reversal.

The high or low of the prior two lines sets the reversal point. If the most recent line is black (down), then the high of the last two lines marks the reversal point. A close above this high would call for a white line to denote a price reversal. Keep in mind that only the most recent line must be black (down). The line just before this black line can be white (up) or black (down). It is the low of these two lines that dictates the reversal point. The chart below shows Dell Inc (DELL) with three 2-line reversals. The first two formed with two black lines. The third reversal formed with a white line and a black line. The horizontal red lines mark the reversal point, which the white line exceeded to forge the reversal.



If the most recent line is white (up), then the low of the last two lines marks the reversal point. A close below this low would call for a black line to note a price reversal. Keep in mind that only the most recent line must be white (up). The line just before this white line can be white (up) or black (down). The low of these two is what decides the reversal point. The chart below shows United Parcel (UPS) with three 2-line reversals. The first and third reversals feature a black line/white line combination. The middle reversal shows two white lines. The horizontal green lines mark the lows or reversal points, which the subsequent black line exceeded to forge the reversal.



Three Line Reversals

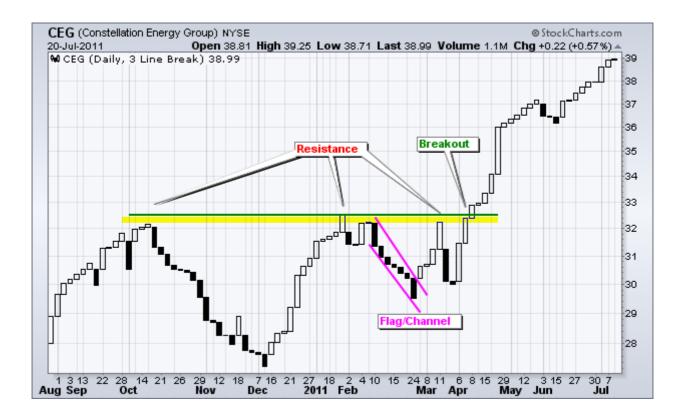
reversals can occur in a trading range or as a continuation of the bigger trend. A Three Line Break, on the other hand, denotes a stronger move that can signal a trend reversal. A bullish trend reversal occurs when three black lines form and a single white line breaks the high of these three lines. A bearish reversal occurs when three white lines form and a single black line breaks the low of these three lines.



The chart above shows the Russell 2000 ETF (IWM) moving from a downtrend to an uptrend and back to a downtrend. The downtrend starts with the first black line on June 6th. A new black line will not be drawn unless prices move below this low. Notice how the date moved from June 6th to June 8th without a line in between (1). June 7th is not shown because prices did not move enough to justify a new black line or a white reversal line. Prices moved to a new low on June 8th to justify a new black line. This downtrend continued until the closing price exceeded the high of the prior three black lines (2). This 3-Line Break signaled the start of a new uptrend on June 21st. Prices traded within the range of this white line until June 28th (3). On June 28th, five trading days later, prices exceeded this high to justify a new white line. Prices continued higher the next six trading days as new white lines were added each day. The uptrend reversed when prices moved below the low of the prior three white lines (4). This 3-Line Break justified a new black line to signal the start of a downtrend.

Support and Resistance

Three Line Break Charts produce clear reaction highs and lows upon which to base resistance and support. Chart analysis works the same way as on a bar or candlestick chart. The example below shows Constellation Energy (CEG) with a clear resistance zone marked by three reaction highs. The stock broke resistance with a surge in early April and continued much higher. Also, notice that a falling flag or channel formed in February.



Patterns

Classic patterns are also viable on Three Line Break charts. Double Bottom, Double Top, Head-and-Shoulders Patterns, Triangles, and others can form on these charts. The chart below shows Vulcan Materials (VMC) with a large Symmetrical Triangle forming from January to May. The stock broke the lower trend line and support with a sharp decline in early May.



Conclusions

Like their other Japanese cousins (Kagi and Renko), Three Line Break charts filter out the noise by focusing exclusively on price changes. The lines do not change unless price changes by a specific amount. In contrast to Point & Figure charts, which used a fixed box size, this amount depends on the range of the last 2 lines. This range can vary quite a bit. The ability to filter noise makes these charts especially useful to determine the underlying trend. It is easy to spot important highs and lows. Armed with this information, chartists can identify uptrends with higher highs and higher lows or downtrends with lower lows and lower highs. As with all charting techniques, chartists should employ other technical analysis tools to confirm or refute their findings on Three Line Break charts.

SharpCharts

Three Line Break Charts can be drawn in SharpCharts by selecting Three Line Break for "Type" under "Chart Attributes". Users can check the "color prices" box to see red lines for the down periods. <u>Click here</u> for a live example.





Further Study

As the name implies, this book goes beyond candlesticks to show chartists other technical analysis techniques from the Far East. Nison devotes an entire chapter to Three Line Break charts. Nison also covers Renko charts, Kagi charts and explains how Japanese traders use moving averages.

