Volatility Time Bands (VTBands)

This study looks at the time of day for a chart period and creates an average of the range for that bar over a user-defined look back period. It then places 1, 2, and 3 standard deviations around the opening price of that bar.

Philosophy

Volatility Time Bands have multitude of applications on all asset classes and timeframes down to the 15 minute chart. For a full explanation see Chapter 1 of Trading Time and various case studies throughout the book.

Nearly all momentum based indicators look at momentum on a continuous basis and have no automatic adjustment for the time of day that it is, or what the normal behavior is at that time. Volatility Time Bands analyses both the time of day and its relationship to range. The study analyses the current time of days range in relationship to its user defined average of range for that time of day in that timeframe chart. It then places 1 and 2 and 3 standard deviations around the opening of the current bar. In contrast to Range Deviation Pivots there is no skew for trend so the bands are symmetrical. The lowest timeframe for computation is set at a 15 minute bar.

Interpretation

Volatility Time Bands have various applications.

- What is the trend? Are we above or below the bands?
- How strong is the trend? Where is price in relationship to the first up or down band?
- Is the trend accelerating? The relationship between the first bands, any closes outside the 3rd, and what the time of day actually is
- Has the trend changed? Has price switched from one side of the bands to the other side?
- Has the trend reached an extreme? Is it the correct time of day, is it doing so on multiple timeframes and does it connect with Range Deviation Pivots Historical?

All of these questions have applications, especially from a day trading point of view. One of the most common uses is to identify the trend and if it is up, place a limit order to buy at the 1 band down. The connection between multiple timeframes is also very powerful. A confluence of the 3rd band on the 15, 30 and 60 minute chart provides a firm reference of an extreme.

Closes outside of the 3rd band indicate activity beyond the normalized and are especially referenced on bars that have been influenced by news stories or statistics.

By combining VT Bands with other 4th Dimension indicators such as Range Deviation Pivots, powerful moves can be foreseen. One example is when extremes of Range Deviation occur across daily and weekly time frames, whilst simultaneously reaching extremes of range for the time of day on Volatility Time Bands.

Within Setup the user can modify the Lookback days over which volatility is calculated and the number of standard deviations to be plotted on the chart. The default settings are recommended.