# Average True Range: A measure of Volatility!

We are going to look at another indicator – the ATR. For those of you who are experienced traders, you can skip this lecture.

Developed by J. Welles Wilder, the Average True Range (ATR) is an indicator that measures volatility.

True Range

Wilder started with a concept called **True Range (TR)**, which is defined as the greatest of the following:

- Method 1: Current High less the current Low
- Method 2: Current High less the previous Close (absolute value)
- Method 3: Current Low less the previous Close (absolute value)
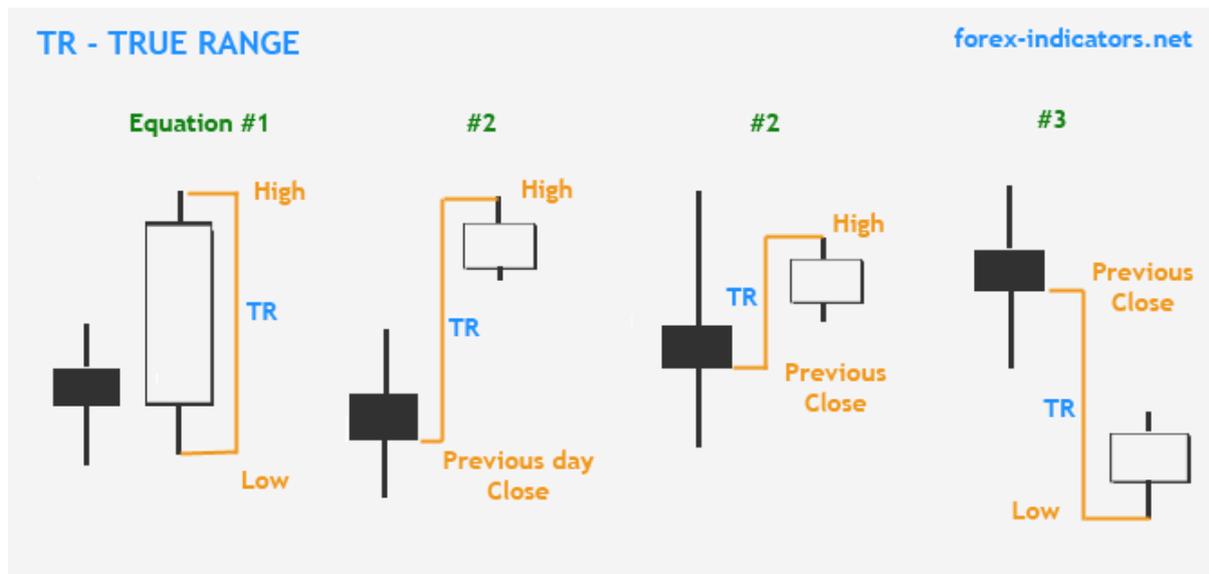
Calculation – Average True Range

Typically, the Average True Range (ATR) is based on 14 periods and can be calculated on an intraday, daily, weekly or monthly basis. For this example, the ATR will be based on daily data. Because there must be a beginning, the first TR value is simply the High minus the Low, and the first 14-day ATR is the average of the daily TR values for the last 14 days. After that, Wilder sought to smooth the data by incorporating the previous period's ATR value.

Current ATR = [(Prior ATR x 13) + Current TR] / 14

- Multiply the previous 14-day ATR by 13.
- Add the most recent day's TR value.
- Divide the total by 14

Conclusion

ATR is not a directional indicator, such as MACD or RSI. Instead, ATR is a unique volatility indicator that reflects the degree of interest or disinterest in a move. Strong moves, in either direction, are often accompanied by large ranges, or large True Ranges. This is especially true at the beginning of a move. Uninspiring moves can be accompanied by relatively narrow ranges. As such, ATR can be used to validate the enthusiasm behind a move or breakout. A bullish reversal with an increase in ATR would show strong buying pressure and reinforce the reversal. A bearish support break with an increase in ATR would show strong selling pressure and reinforce the support break.