TRADING WITH ATR part 2

By Daryl Guppy

Volatility is the new challenge in modern markets. It has made identifying the end of downtrends and the start or new uptrend more difficult. We have made increased uses of the trader's application of the Average True Range (ATR). The ATR calculation contains a number of variables and in these notes we show how they are selected and combined to give optimal outcomes for individual stocks.

The ATR tool in the GTE charting package is exceptionally useful because it allows the trader to start the ATR calculation from a user selected point selected with the click of a mouse.

We create a candidate pool for closer examination by using a 10 and 30 day moving average crossover search. The stocks in this pool are then analysed using the ATR indicator.

Changes in ATR sensitivity have a large impact on the positioning of trading signals.

The changes in sensitivity can be seen on the chart. The 1*ATR delivers a trend change signal more quickly than the 2*ATR calculation. In volatile conditions we prefer to use the more sensitive calculation so we can get an early signal. The key to deciding which to use is the compatibility. In this chart extract neither the 2*ATR nor the 1*ATR generate false exit signals in this falling trend. In this case, we would use the 1*ATR calculation.

The same shift applies if we change the sensitivity of the long side ATR. We use the more sensitive short side 1*ATR as the reference point.
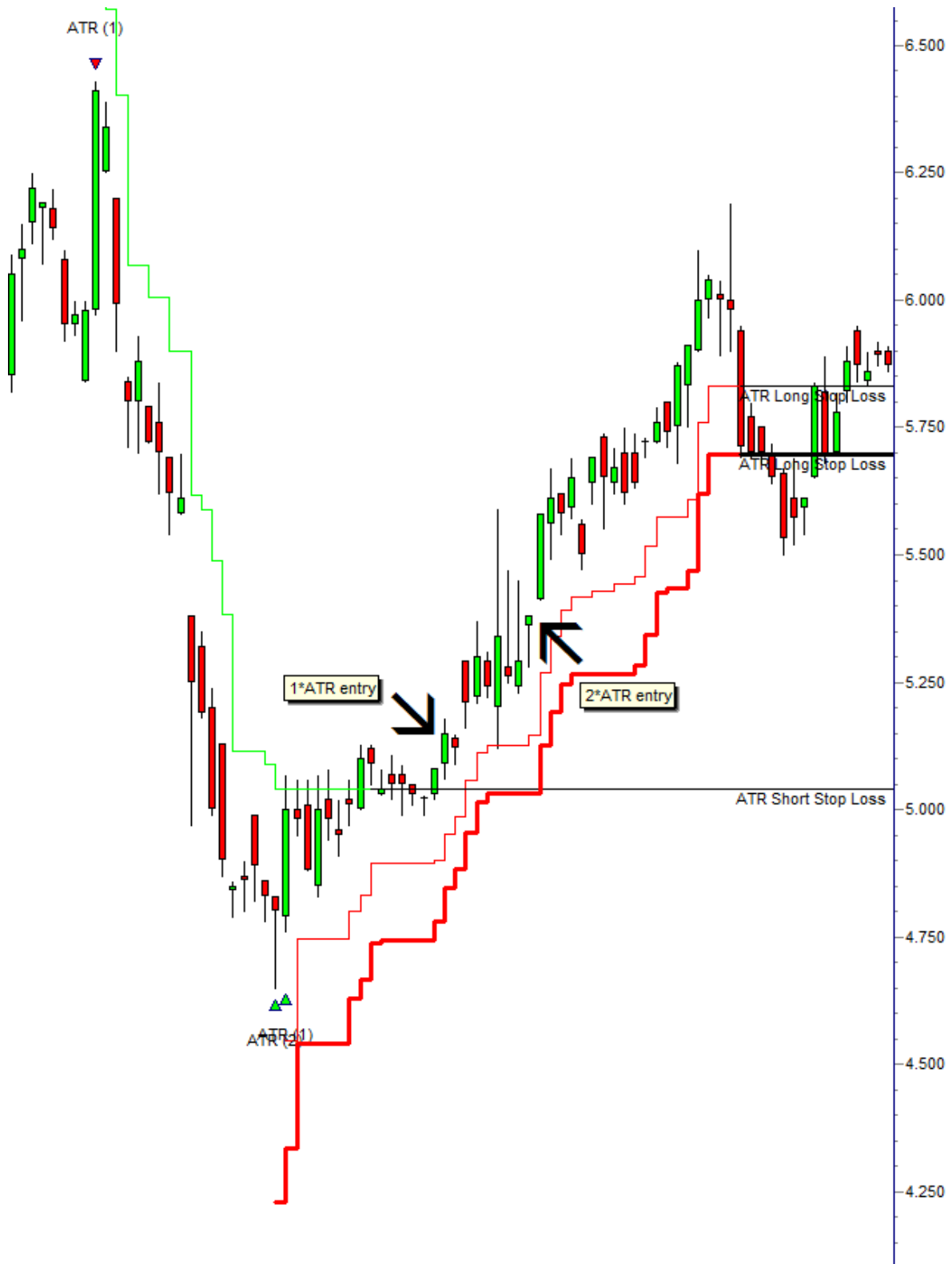
The objective is to adjust the sensitivity of the ATR calculation by adjusting the application of the ATR calculation from 1*ATR to 2*ATR. The sensitivity adjustment is designed to be compatible with the observed trend. In falling markets

with high volatility we use a short side 2*ATR calculation to ensure the trend breakout is genuine. We then use a 1*ATR to ride the rising trend to keep the stop loss tight to protect profits.

The combination you use is a judgement call. This is the methods we use. In a volatile falling market if the 1*ATR short sides calculation is compatible with the falling trend because it does not give false exit signals, then we apply the 1*ATR short side. This gives an earlier entry signal into the trend reversals. We use 1*ATR to trade the rising trend to keep the stops tight.

We use a 14 day calculation period for the ATR. The chart shows the impact of changing the calculation length. We used the 14 day 1*ATR as the base calculation point.

The chart contains the following labels:
- 21 EMA blue
- 14 MA Green
- 7 MA Pink
- 3 EMA Black
- ATR Short Stop Loss
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X-axis dates: 24/2012, 6/7/2012, 6/22/2012, 7/6/2012, 7/20/2012, 8/3/2012, 8/17/2012, 8/31/2012

Y-axis values: 6.500, 6.250, 6.000, 5.750, 5.500, 5.250, 5.000, 4.750, 4.500, 4.250, 4.000

We use a 3, 7, 14 and 21 moving average of the 1*ATR short side. There is no strongly significant difference in the entry points for these values. We find the default 14 day calculation gives robust results that work in most situations.
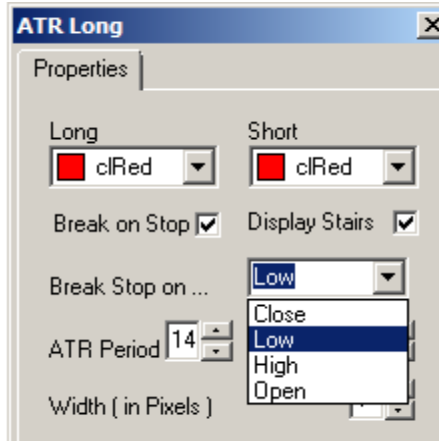
The final variable is the trigger point in the ATR calculation. The trigger point is the point where the ATR calculation ends. This is shown by a horizontal line that moves to the right of the chart. In GTE this line colour changes to black. For the short side ATR we use a trigger point abased on the low. The low must be higher than the value of the short side ATR before the ATR indicator signals a change in trend. For the long side ATR we prefer to use the closing price as the trigger.

ATR close Exit

ATR Long Stop Loss

ATR low Exit

ATR (1)
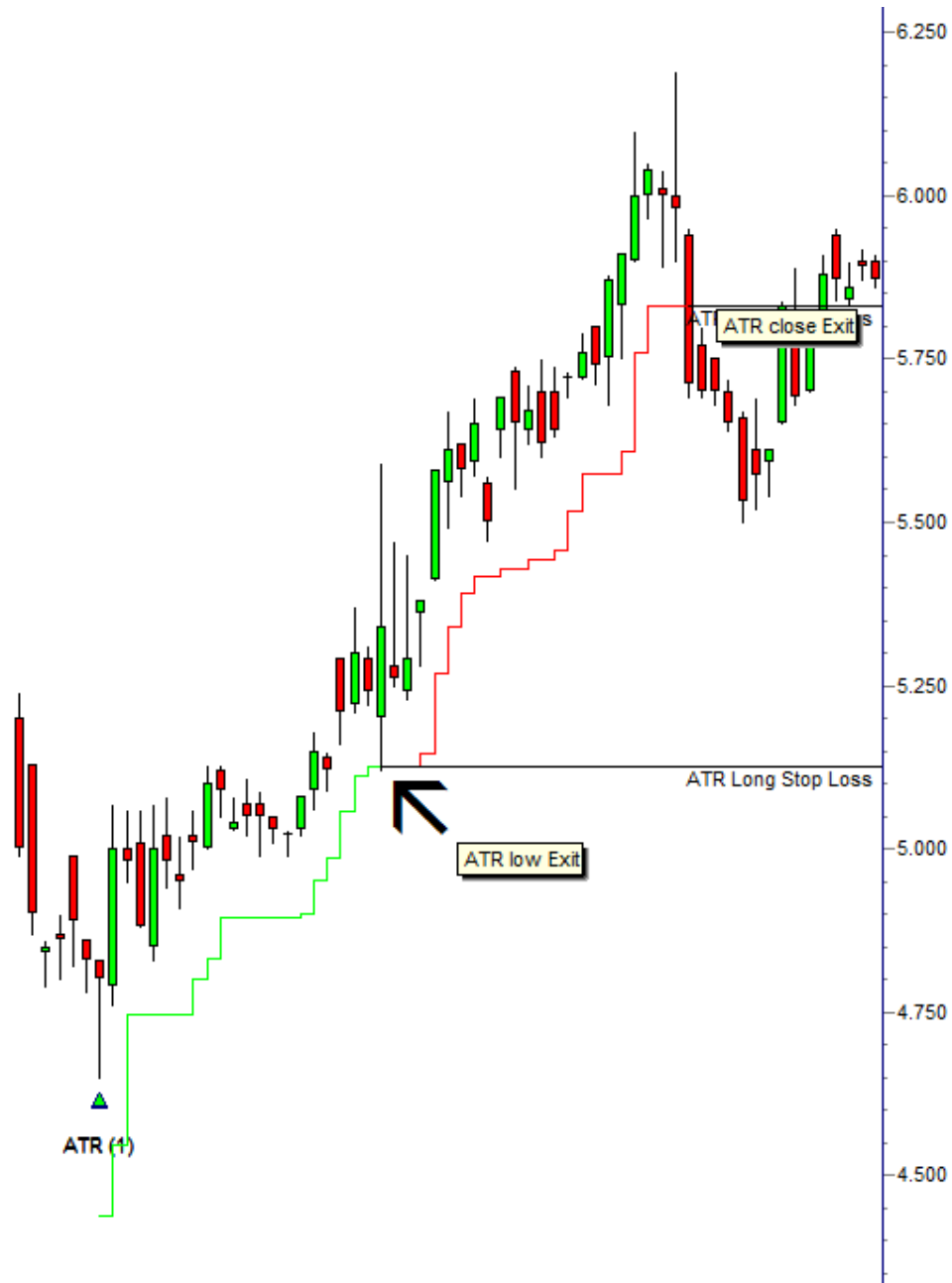
The chart shows the difference. The calculation for the ATR does not change, The green ATR line exactly matched the red ATR line calculation. The difference is when the ATR calculation stops. If the trigger is based on the low then an exit is triggered near $5.12. It is a false exit. If the close is used as the trigger then the exit is triggered near $5.84.

We find the application of traders ATR to be very successful in current market conditions. These notes explain in detail how we assess and apply this indicator.