

ATR AND ADR

By Daryl Guppy

The difference between Average True Range (ATR) and Average Daily Range (ADR) is an important concept in the application of the ANTS trading approach. It's also relevant to other trading methods because ADR gives us an easy way to identify good trading opportunities. In many markets there is a 85% probability that today's price activity will reach 75% of the value of the 5 day ADR. If the 5 day ADR is 100 then there is a 85% probability today's price move will add 75.

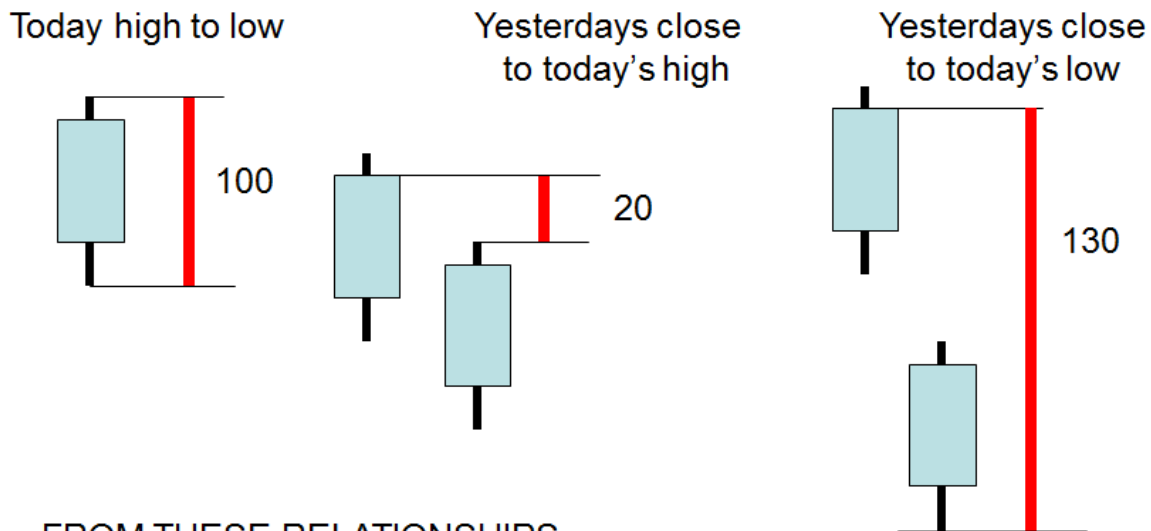
We use this with Index trading, commodities and FX trading. We are currently testing this method with three classes of stocks – blue chips, midcaps and speculative low priced stocks. We will bring you the results, and the coding, over the next few weeks.

But we need to be clear on the differences between ATR and ADR.

ATR

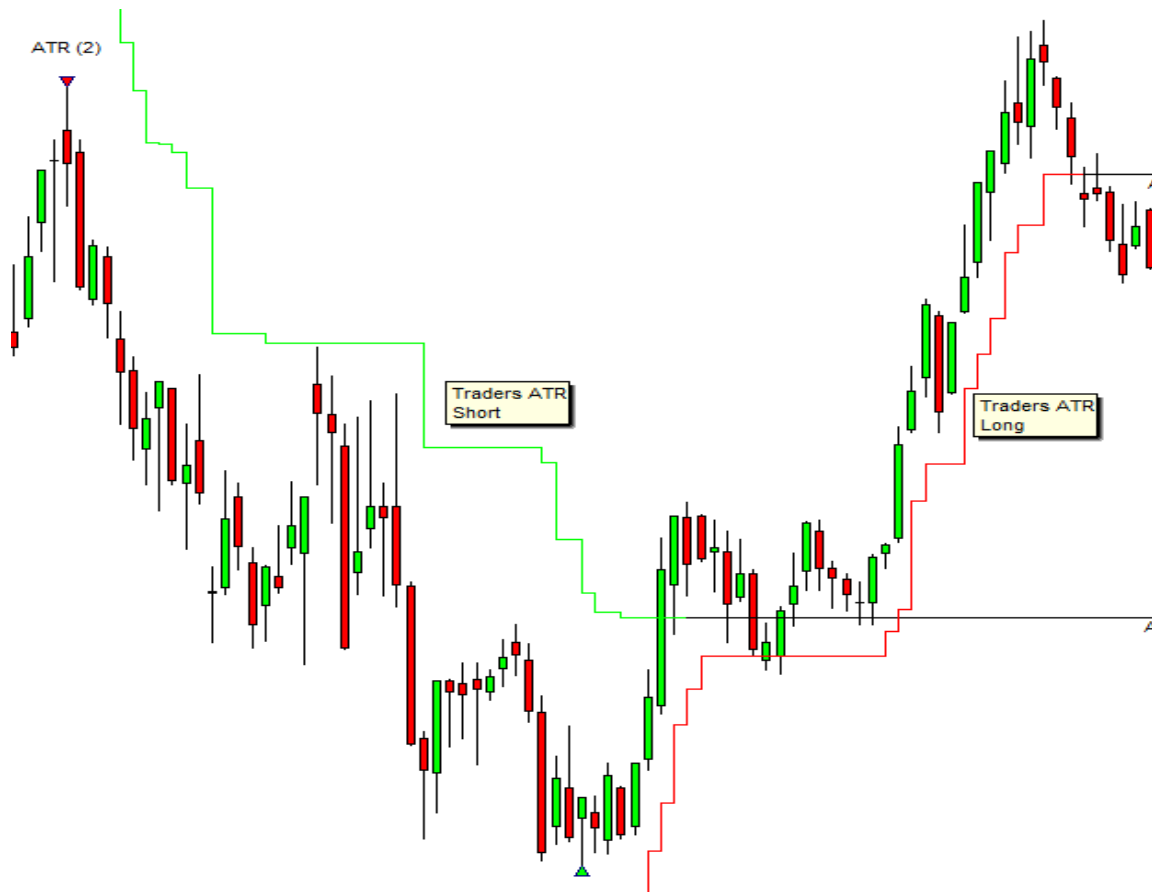
The ATR concept was developed by Welles Wilder. The purpose is to define the true range activity of price. Once calculated this is used to understand the volatility of price. Moves above or below the ATR value – exceptional volatility – are often associated with a change in the trend. This is how its calculated.

Find the 5 DAY **AVERAGE TRUE RANGE** of price



FROM THESE RELATIONSHIPS
SELECT THE LARGEST FIGURE FOR DAY 1 CALCULATION ie 130

130 is the value for the ATR for one day. If we are calculating a 5 day ATR then the value is calculated for each of the previous 4 days.



SELECT THE LARGEST FIGURE FOR DAY 1 CALCULATION ie 130

Day 1 calculation 130
 Day 2 calculation 90
 Day 3 calculation 150
 Day 4 calculation 70
 Day 5 calculation 100

TOTAL 5 DAY CALCULATION = 540 / 5 days

5 DAY ATR value = 108

This value shows the expected price volatility on average over the 5 day period. However it really compares the activity over 2 days to get the ATR value. It's a very useful figure for determining when a price move is larger than the average price volatility. This can be used to manage a stop and define trends.

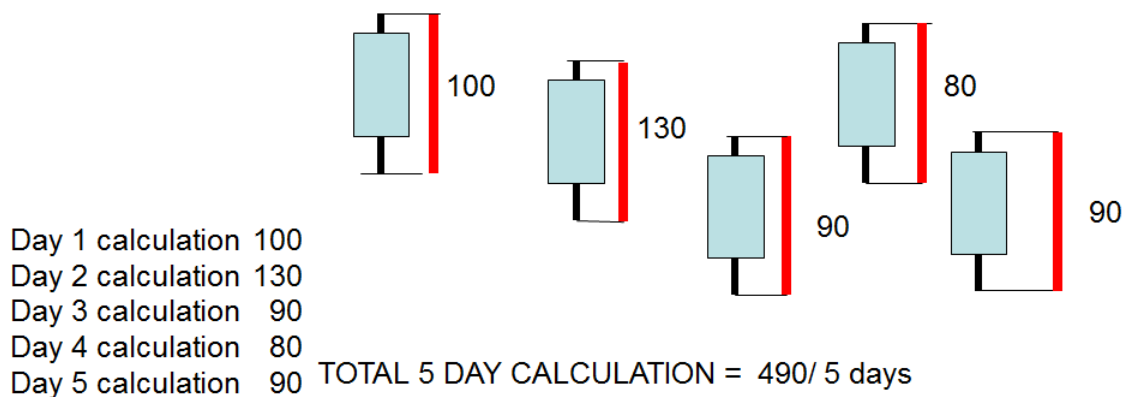
We modified the daily of ATR to show Traders ATR. This is a single line under a rising trend, or above a falling trend. It is used as a stop loss, so the stop loss

value never retreats if the ATR value retreats. A move below or above the ATR is used as an end of trend signal. It's a very successful stand alone method of identifying and managing trades.

ADR

The ADR calculation is different. It is used to estimate the potential price range for today's price activity. This creates a statistical relationship where there is a 85% probability of achieving 75% of the value of the 5 day ADR. The higher the value, the greater the potential for price to move today. The ADR calculation's are used to identify and rank potential trading candidates. It becomes a search tool. ATR is a trade management tool. This is how ADR is calculated.

Find the 5 DAY AVERAGE DAILY RANGE of price low to high



5 DAY AVERAGE DAILY PRICE RANGE = 98

Here's how the calculation is applied to FX pairs. These values are posted on <http://www.antssys.com/>. The trading pool is the FX pairs with the highest 5 day ADR. We limit our analysis to the top 5 pairs and execute the FX trades using OANDA and the ANTS system. These change every day depending on movements in their ADR values.

Currency Pair ↕	5 Day ADR, 5 ↖	10 Day ADR, 10 ↗
GBPCAD	173	164
USDCAD	163	133
GBPNZD	150	172
EURCAD	148	132
GBPAUD	143	186
GBPJPY	135	148
GBPUSD	129	138
EURAUD	125	160
EURUSD	124	126

Remember these are pip ranges and FX leverage makes these very profitable moves.

Typically the ADR values for equities are also a small range. The trading pool is executed using a CFD so the small price move is translated into a larger return due to CFD leverage.

The ADR is the starting point for trade identification with equities. Once entered, the trade may be managed with Traders ATR.