# TRADING THE RANGE
*By Daryl Guppy*

In these notes we get to the operational core of the ANTS system. Its taken a while to get here because its important to understand where this fits into the problems of price and defining significant price activity. Without this background its difficult to appreciate the dimensions of the breakthrough offered by ANTS analysis.

The foundation of the ANTS system is the underlying range bars. These range relationships are the foundation for ANTSSYS signals, super guppy and an ATR signal that measures the average range of the range.
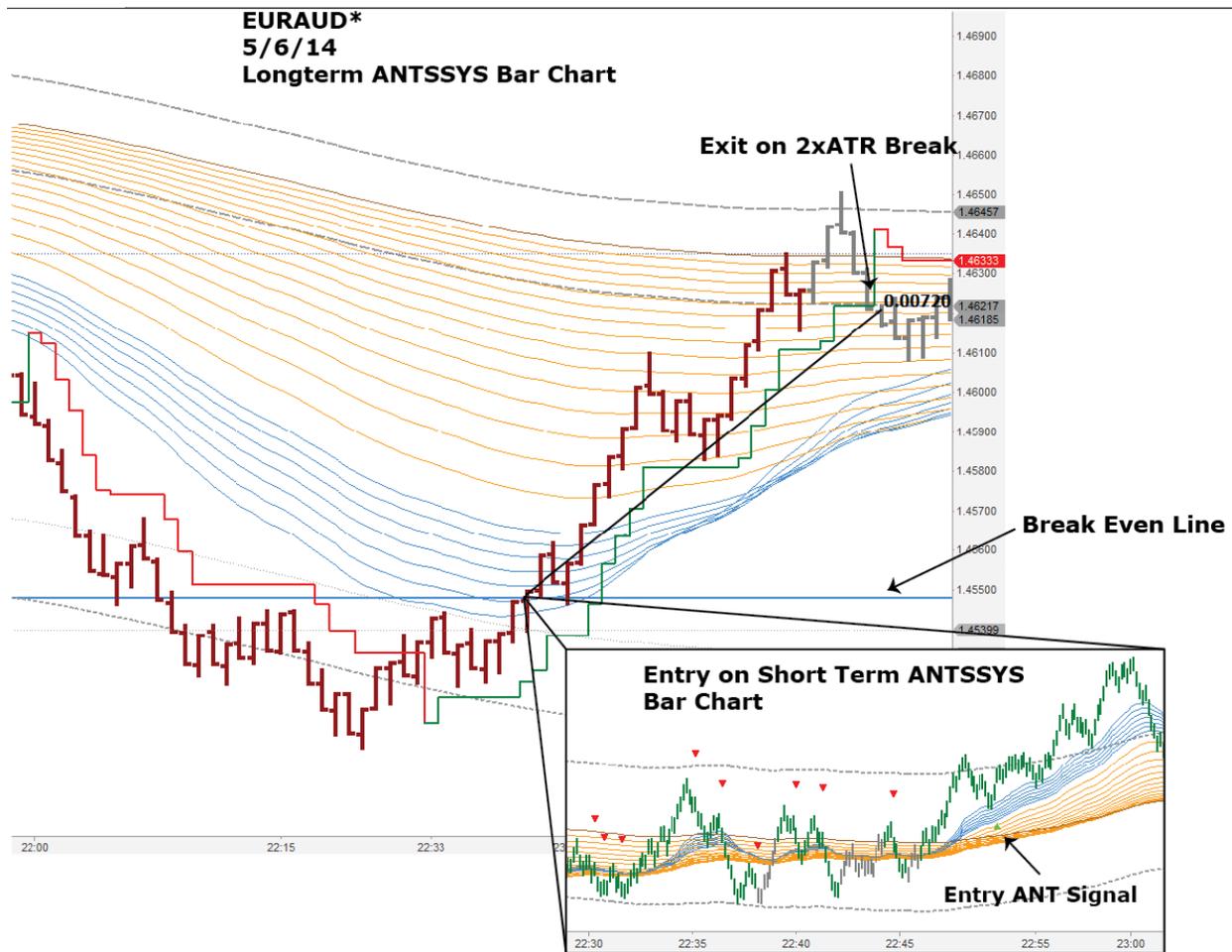
Range bars take only price into consideration. Like an X or O on a point and figure chart, a new range bar is added only when there has been a specific movement in price. This might be a five pip range, or a 10 pip range. For the chart display this means that time is not important. The time scale is directly related to the volatility of the price movements. Range bar charts can have any number of bars during a trading session. If there is high volatility then there will be more bars on the chart. If there is low volatility, then there will be less bars on the chart.

This is also related to the count back line concept where the positioning of the CBL line depends on significant price action and not just the elapsed number of bars. Range bar were developed by a Brazilian trader, Vicente Nicolellis.

Range bar rules are:

- Each bar must have a high to low range that equals a specified number of pips.
- Each bar must open outside of the high/ low range of the previous bar
- Each bar must close at either its high or its low.

Range bar charts smooth out price activity removing the insignificant price activity. This leads to more accurate trend lines with more reliable trend line breaks. This has been recognised as the primary advantage of range bar charts. The ANTS system takes this advantages and adds to them.

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Longterm ANTSSYS Bar Chart

Exit on 2xATR Break

0.00720

Break Even Line

Entry on Short Term ANTSSYS
Bar Chart

Entry ANT Signal

## ADVANTAGE 1

When the GMMA is calculated on the closing price on a range bar chart this improves the identification of the underlying trend. It removes many of the confusing signals from the short term GMMA and allows for clearer trend definition.

## ADVANTAGE 2

When the super Guppy component is calculated using the range bar as the starting point then there is a clearer understanding of trend strength and trend limits. Bubbles in the super Guppy are more easily identified and more reliably used to identify pull back and trend retracement opportunities. This lies at the heart of ANTS trading.

## ADVANTAGE 3

The proprietary ANTS indicator algorithm provides a reliable entry and exit signal on these trend changes. The reliability is increased because only the significant price activity is used in the calculation. The range bars remove the market noise and ANTS identifies the clear trend change signals.

## ADVANTAGE 4

When we apply an adjusted ATR calculation it uses the modified range bar price and time frame for the stop loss calculation. This results in a more reliable ATR signal because the range at the heart of the ATR calculation is more effectively defined.



The combination of range bars with the GMMA and the ATR calculations is a conceptual breakthrough. The use of the ANTS entry and exit signals provides a practical application of the concept. We feel it's a significant step forward and provides an effective method for trading FX markets. This develops a suite of trading methods and we look at these next week.