FX VOLATILITY AND RANGE part 2

By Daryl Guppy

The construction of price charts lies at the core of the ANTSSYS suite of trading solutions. The foundation of the chart display is an intra-day time scale rather than an arbitrary period selected as the trading day. We need a chart display that remains the same in all time frames. The candle does this in a time based chart.

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NY    14.00 -14.01
Asia  22.00-22.01
UK    18.00-18.01
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**1 minute FX candle chart
same in all time zones**

What we want to do is extract the significant price action from the insignificant or unimportant price action. We want to apply this to an entire chart display so we can eliminate the background noise and focus just on the high probability points where price activity offers better opportunity.

RANGE ACTIVITY
For trading the most important measure in the FX market is range. We need significant moves to be able to trade and time in the market in the FX market is a major risk factor. A time based chart series doesn't provide the information we need. The first step in identifying potential trading opportunities is to establish recent ranging activity of each pair.

This narrows down the number of pairs we need to look at in the same way that a stock search is used to create a pool of stocks suitable for trading.

	Pips	
GBPAUD	149	
GBPCAD	145	
GBPNZD	144	
EURCAD	123	
EURAUD	119	
EURNZD	115	
AUDCAD	98	
GBPCHF	82	
NZDCAD	78	

We rank the currency pairs by their 5 day range. A range of 200-250 pips is preferred as this delivers 100 to 200 pip trend-style trades. When the range is 100 – 150 pips we use an ETT strategy. Less than 100 pips then it's time to go to scalping. The ANTSSYS has a suite of trading strategies built around these ranging results. However these are applied to the top 6 to 10 pairs appearing in the search ranking lists. Our focus is on the major pairs rather than exotic crosses with little known currencies.

The large daily price range provides consistent opportunity for trading. There is a high probability of reaching range targets. There is an 85% probability of reaching 75% of trading range. Understanding the range relationships is the foundation of the ANTSSYS FX trading approach.
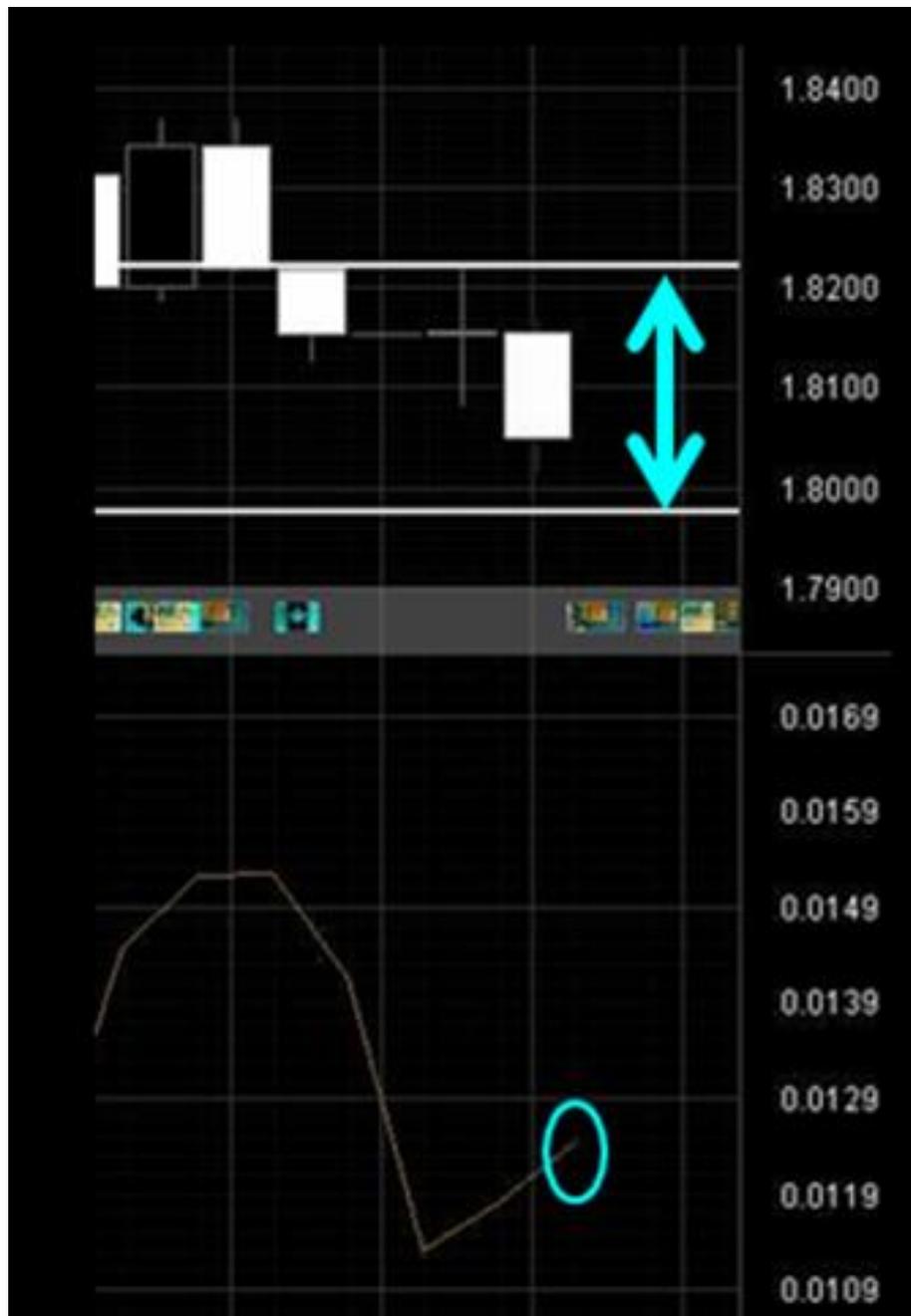
       Here's how this can be applied to a time based chart using a 5 day average true range calculation. We use the 5 day ATR value of 124 pips to set upper and lower range for the next trading day calculated from OPEN at 1.81. This is a modification of the standard application of ATR analysis. It's a direct transfer from equity trading approaches and it doesn't give a particular advantage in the FX market.

       This is not enough. The key is more robust trend definition. This comes from the Super Guppy. The second key is the nature of price. The FX market has instant reactions so it's important to combine price change and momentum. The solution lies in the range of price activity. Once we have a range solution then the stop loss

solution is also range based. This is not the same as a count back line. It is a variation of the Traders ATR but using the range of price rather than just price. This brings together the concepts of point and figure as a filter of significant and insignificant price activity.
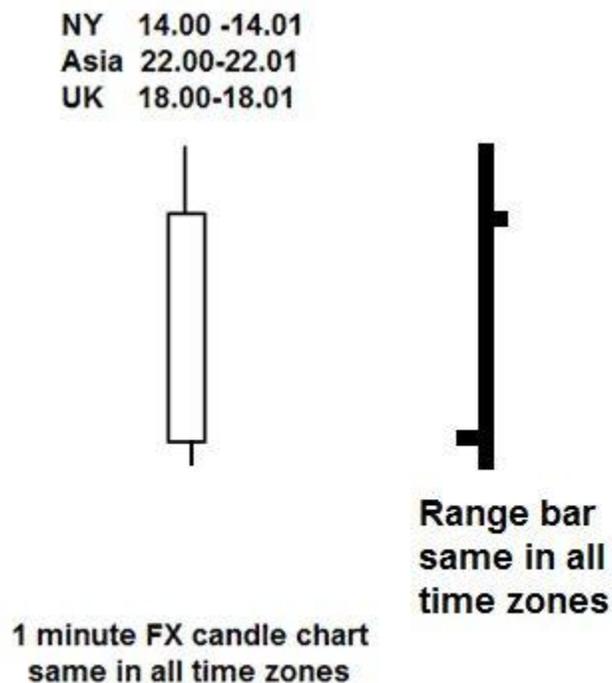
We take the next step and use price range as a filter on the chart display and this significantly increases the reliability of trading signals. Here's what the chart looks like.

There are four things to notice;
- We use bars rather than candles. The main reason is that this provides a cleaner background for the indicator overlays.
- The time frame is adjusted. During periods of no activity the time frame is compressed. During periods of high significant activity the time frame is expanded to show the price activity

•The construction of the range bar captures significant movements. The shift to a new bar is determined by price activity, not by time elapsed. This is the same as a point and figure chart. This allows the trader to drill down on periods of significance

•The ATR stop is applied not to price, but to changes in the activity of price based on range breakouts. The ATR becomes a derivative of a derivative and this significantly improves reliability.

NY   14.00 -14.01
Asia 22.00-22.01
UK   18.00-18.01

Range bar same in all time zones

1 minute FX candle chart same in all time zones

The one minute candle is now changed into a single range bar that may compress several minutes, or be as short as several seconds. What happens in each one minute is less important than the changes in the range activity which may take minute, or seconds, or hours. This chart display captures the significant action of the market rather than the activity of the market. And yes, it can be applied to a stock chart but on most stock charts this type of display highlights the issues we wrote about in previous articles. There is volatility, but little change in the range activity. The trading opportunities are increasingly limited by the changed nature of the stock market.

These range relationships are the foundation for ANTSSYS signals, super guppy and an ATR signal that measures the average range of the range. We look at this is the next article.