Commitment of Traders (COT) Report Analysis – AUD

By EZCurrency

Firstly to give credit where credit is due, this work is based upon the work done by Floyd Upperman in his COT system (http://www.upperman.com/).

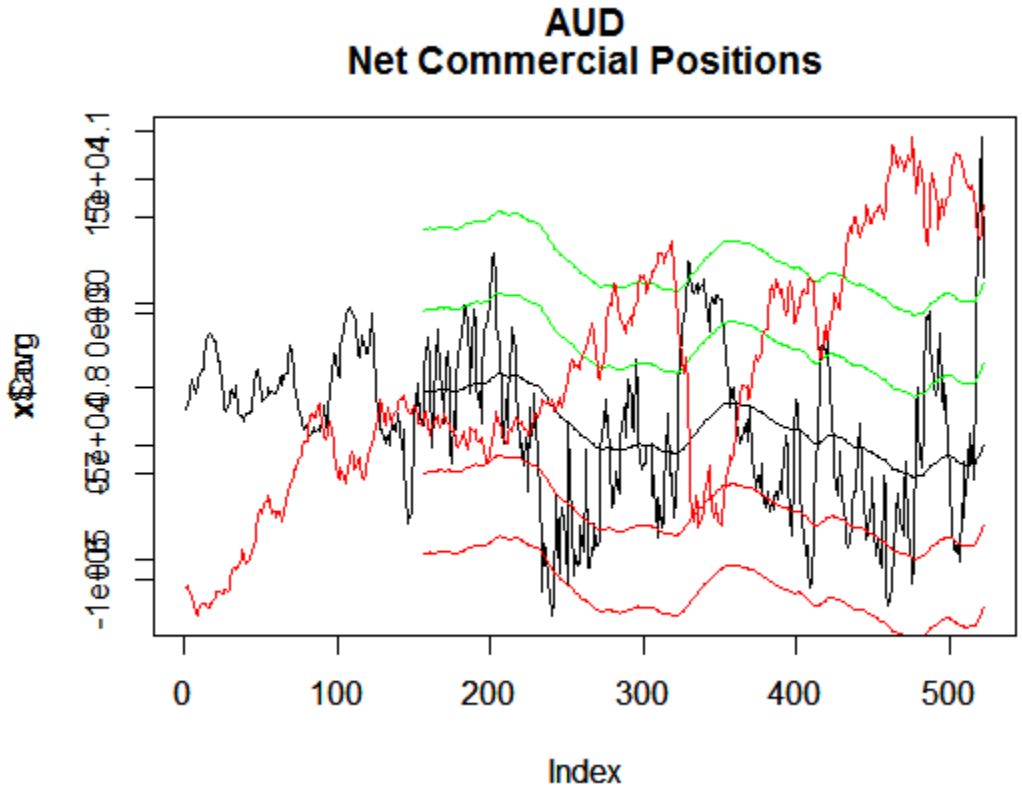
Now I believe that we CAN predict when it is highly probable that a change in trend may occur … this has been a question if you are trading an equity millipede (referring to the **Building an equity millipede** thread: http://www.forexfactory.com/showthread.php?t=245149) Where do we exit to lock in profits before a change of trend occurs.

Using the system outlined here (R code is included at the end, along with a sample input file), this will give us an indication of which week the trend will likely occur. ** We must use technical analysis: a simple moving average cross or whatever to key us in for the actual entry. This system tells us when a change of trend is likely, *but we need technical indicators to confirm the change in trend.*

First, if we look at the COT report, it is reported weekly each Friday from the CFTC website (http://www.cftc.gov/marketreports/commitmentsoftraders/index.htm) The data is reported each Friday, but is collected on the close of markets from the previous Tuesday. We want to focus mainly on the *commercials* and *non-commercial* NET positions (net being total long - total short) for each category.

Below is the AUD net commercial positions which is the black line. The green lines are +1 and +2 standard deviations from the 3 year mean (black line), and red lines are -1/-2 stdev. The red line is the avg AUDUSD price for the week (O + H + L + C) / 4. The commercials are typically 'in the know' and take positions before the large moves happen.

Basic COT model



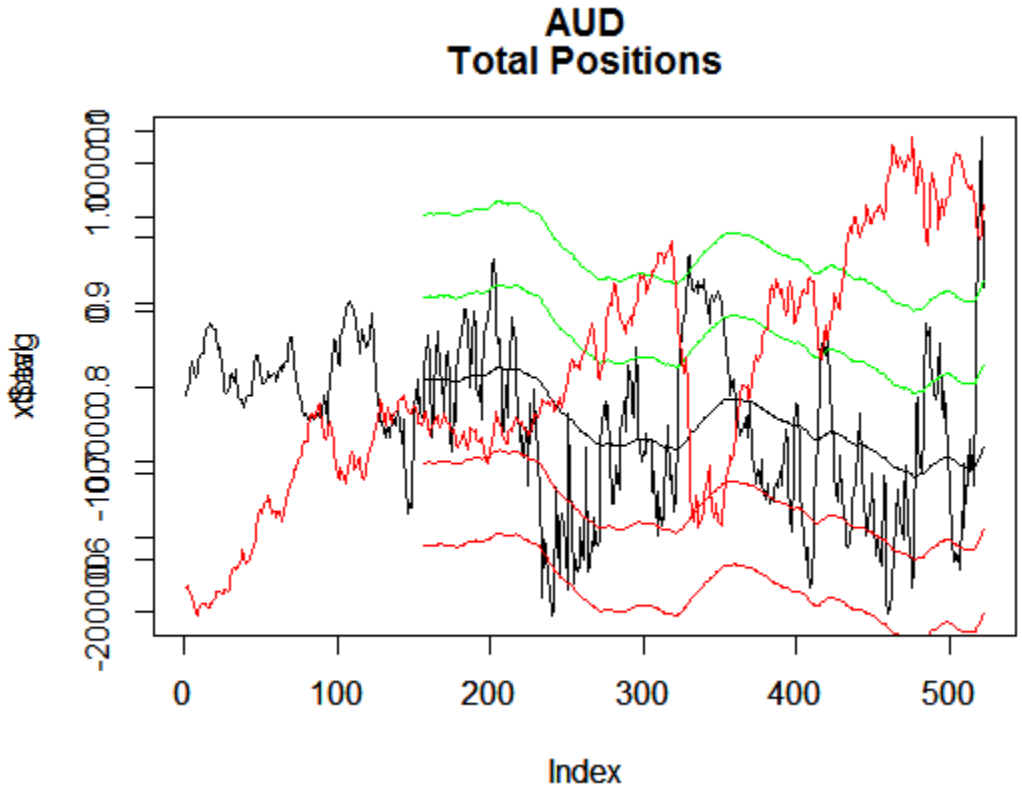
Disregard the scale on the right … it is two scales overlaid (price and commercial positions … all we want to look at are the relative changes at extreme points. Notice how when the net commercial COT positions are at extreme levels (1 or 2 stand deviations from the mean) and reverse, that the price reverses (red line).

Now we can add to this trading model and say that commercials are long at bottom (they usually hedge and go against the trend), and non commercials are short at bottom of a big move, since they are the funds and trend followers. So if we make a new indicator called total:

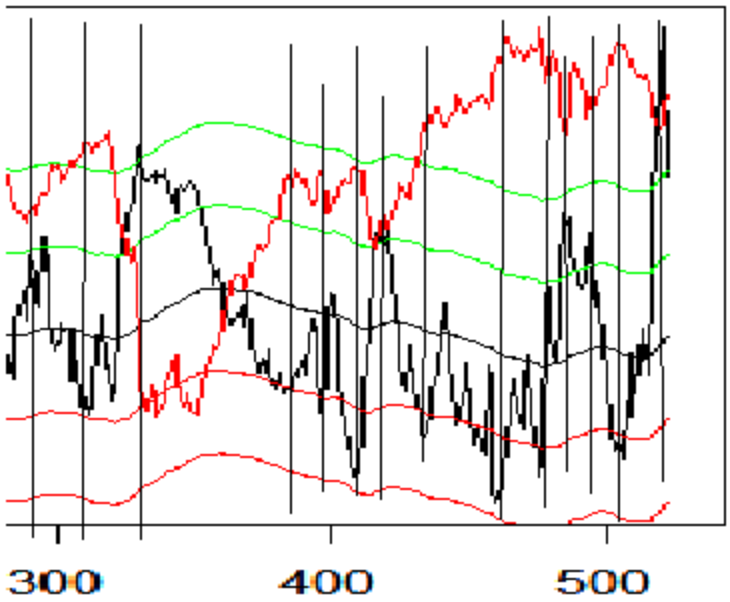
total = net commercial – net non commercial

and plot it, it will look similar to the graph above:

Slightly more complex model



Now if zoomed in from index 300 to the end, which is approximately 219 weeks of data we can get a better look at what is occuring:



When the total positions (black line) reach extreme levels at the +1 or +2 standard deviation levels**, the commercials are net long and the non commercials are net short at extreme levels.** **When everyone is on one side of the market, it trend to reverse.** Now look at the price (red line) … it reverses up when the black line (total positions) are at extreme levels **and reverse**.

The opposite occurs when the black line is at extreme -1 or -2 standard deviations from the mean, and reverses up … a market top is near.

Now I will re-iterate what I said before:

> *We must use technical analysis: a simple moving average cross or whatever to key us in for the actual entry. This system tells us when a change of trend is likely, but we need technical indicators to confirm the change in trend.*

Sometimes the trend can last a while … with commercials adding to shorts and non-commercials adding to longs (in an uptrend), or vice-versa for a downtrend. That can last for weeks … so it is important to watch and use TA as a technical point to enter. A simple moving average on daily or 4 hr charts (or MA cross) would probably be a good filter.

Recent Example: Looking at the graph above, when the total positions were at -1 stdev and reversed up, AUDUSD was around 1.08. A few months later, the total positions were way above the +2 stdev (probably at +3), and price was around 0.96. This is a move of 1200 pips. Using TA (with simple MA crossovers on 4 hr or daily charts), once could easily catch 900 to 1000 pips of this if they had the proper patience. Once initial positions were entered and SL

was put in place, positions could be exited at next extreme standard deviation level after MA cross in the opposite direction of the trend.

Can we make this better by incorporating Open Interest (OI)?

What if we consider Open Interest? If you are not familiar with OI, first review this:

http://goldavalanche.blogspot.com/2012/04/primer-on-open-interest.html

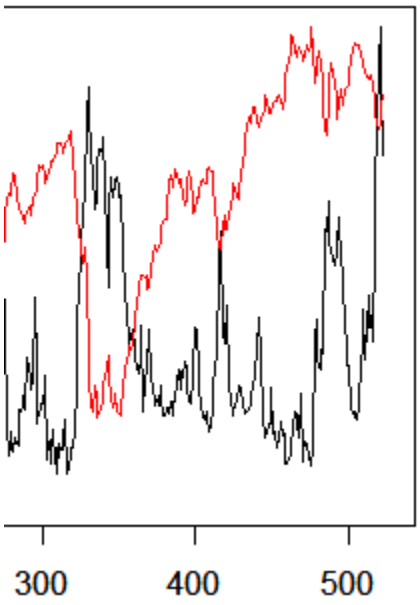
And this:

Price	Open Interest	Interpretation
Rising	Rising	Market is in a strong uptrend
Rising	Falling	Uptrend is weakening
Falling	Rising	Market is in a strong downtrend
Falling	Falling	Downtrend is weakening

We can also look at short positions as a sum of non-commercial shorts and commercial longs:

shorts = NonComm_Positions_Short_All + Comm_Positions_Long_Old

and divide this sum by OI. The resulting black line spikes up when the market bottoms (red line indicates price).



R code

```
library(TTR)  # install this library and load it ... needed for EMA
aud <- read.csv("AUD COT.csv")
cad <- read.csv("CAD COT.csv")
eur <- read.csv("EUR COT.csv")
gbp <- read.csv("GBP COT.csv")
chf <- read.csv("CHF COT.csv")
jpy <- read.csv("JPY COT.csv")

# change this to what currency you are analyzing
x <- aud; y="AUD"

# check first and last report dates
x$Report_Date_as_MM_DD_YYYY[1 [1]]
x$Report_Date_as_MM_DD_YYYY[dim(x)[1]]

# Open Interest, and zoomed into recent history
plot(x$Open_Interest_All, type='l', main=c(y, "Open Interest"))
plot(x$Open_Interest_All[400:dim(x)[1]], type='l', main="Open Interest")

# non commercial positions
xNonCom <- x$NonComm_Positions_Long_All - x$NonComm_Positions_Short_All
plot(xNonCom, type='l', main=c(y, "\nNet Non Commercial Positions"))
cotDeviationLines(xNonCom, 156)

# commercial positions
xCom <- x$Comm_Positions_Long_All - x$Comm_Positions_Short_All
plot(xCom, type='l', main=c(y,"Net Commercial Positions"))
cotDeviationLines(xCom, 156)

# commercials are long at bottom, non commercials are short at bottom of a big move
# so commercials - non commercials are very long at bottom of move
# commer - non comemrcial plot vs. price
total <- (xCom - xNonCom)
plot(total, type='l', main=c(y,"Total Positions"))
cotDeviationLines(total, 156)

# plot as a percent of OI
plot(total/x$Open_Interest_All, type='l', main=c(y,"Total Positions/Total OI"))
# price graph
par(new=T)
```

```
plot(x$avg,col='red', type='l')

# longs are when non-commercials are long and commercials are short
longs <- x$NonComm_Positions_Long_All + x$Comm_Positions_Short_Old

plot(longs/x$Open_Interest_All, type='l', main=c(y,"Longs/Total OI"))
# price graph
par(new=T)
plot(x$avg,col='red', type='l')

# shorts are when non-commercials are short and commercials are long
shorts <- x$NonComm_Positions_Short_All + x$Comm_Positions_Long_Old

plot(shorts/x$Open_Interest_All, type='l', main=c(y,"Shorts/Total OI"))
# price graph
par(new=T)
plot(x$avg,col='red', type='l')
```