

THE COMPOSITE MOMENTUM AND MARKET CYCLES

Composite Momentum: a definition

Imagine the conveyor belt of an airport, the one that runs along the corridors separating one area from the other. The airport is the market. The area where you step on the treadmill is the starting point of a trend. The area where you get off the belt is the arrival point, from where another belt (another trend) starts.

The COMPOSITE MOMENTUM is the conveyor belt connecting these areas: combining the starting point of a trend to its arrival point. As it happens on the conveyor belt, if you try and walk on it in reverse direction you make a great effort with very little results. Moreover, as soon as you stop to rest, the belt takes you back where you started in a very short time. This is what often happens to those who take an opposite position respect to the underlying momentum of a market (which is like running in the wrong direction: much effort, little result and the belt does not change direction anyway).

Those walking in the right direction but on the floor instead of the conveyor belt are exactly like those who own static allocation versus those who change the allocation according to the trend. They will come too, but it will take a longer time, they will be more tired and fatigued and if they do not run they could miss the flight anyway.

COMPOSITE MOMENTUM helps understand:

- › When to step on the belt → entry on the market
- › Which is the direction (long / short) you should take
- › Where it could be useful to exit / reduce positions

In particular, the application of this indicator for a long and extended period of time (i.e. yearly and quarterly graphs) provides important information about the basic direction of the market. Monthly, it provides investors with the entry and exit timing. On a weekly / daily / intraday basis, it generates "fine tuning" signals for the timing operations of money managers and traders.

The goal of COMPOSITE MOMENTUM is to identify the underlying trend, the turning points, the overbought / oversold situations and particularly potential profitable circumstances (setups).

The CMO is based on a slightly different calculation compared to the usual Momentum, that indicates the strength of the market by measuring the rate of change of prices.

CMO blends the concept of directionality of a momentum-based oscillator (the difference between two moving averages) and the characteristics of a slow stochastic.

Its construction comes from the junction of two indicators, presented officially by the author during two IFTA Conferences, Rome 1998 and Lugano 2006.

The paper on the presentation and use of this indicator has been awarded by IFTA with the "John Brooks Award" of the International Federation of Technical Analysts - IFTA 2008-2009 (best MFTA paper).

The Composite Momentum is the smoothed average of two indicators: **KEY** e **XTL**.

ProRealTime Complete Formulas

KEY:

k=4

media1=WeightedAverage[k](Close)

media2=WeightedAverage[k*3](Close)

MOM=average[1](media1-media2)/(media1)*100

diffMOM=MOM-MOM[1]

If MOM>MOM[1] then

temp1=diffMOM

else

temp1=0

endif

If MOM<MOM[1] then

temp2=diffMOM

else

temp2=0

endif

sumtemp1=summation[5](temp1)

sumtemp2=summation[5](temp2)

abssumdiff=summation[5](abs(diffMOM))

aa=((sumtemp1[1]-(sumtemp1[1]/5)+temp1)/(abssumdiff[1]-(abssumdiff[1]/5)+abs(diffmom))*100)

bb=((sumtemp2[1]-(sumtemp2[1]/5)+temp2)/(abssumdiff[1]-(abssumdiff[1]/5)+abs(diffmom))*100)

cc=aa-abs(bb)

key=ExponentialAverage[3](cc)

return key

XTL:

stoco=Stochastic[5,3](close)

xtl=WeightedAverage[3](stoco)*2-100

return xtl

Composite Momentum:

```
k=4
media1=WeightedAverage[k](Close)
media2=WeightedAverage[k*3](Close)
MOM=average[1](media1-media2)/(media1)*100
diffMOM=MOM-MOM[1]
If MOM>MOM[1] then
temp1=diffMOM
else
temp1=0
endif
If MOM<MOM[1] then
temp2=diffMOM
else
temp2=0
endif

sumtemp1=summation[5](temp1)
sumtemp2=summation[5](temp2)
abssumdiff=summation[5](abs(diffMOM))
aa=((sumtemp1[1]-(sumtemp1[1]/5)+temp1)/(abssumdiff[1]-(abssumdiff[1]/5)+abs(diffmom))*100)
bb=((sumtemp2[1]-(sumtemp2[1]/5)+temp2)/(abssumdiff[1]-(abssumdiff[1]/5)+abs(diffmom))*100)
cc=aa-abs(bb)
key=ExponentialAverage[3](cc)

stoco=Stochastic[5,3](close)
xtl=WeightedAverage[3](stoco)*2-100

Composite=WeightedAverage[2]((2*key+xtl)/3)

l1 = 50
l2 = -50
linea1 = 80
linea2 = -80
linea3 = 0

return linea1, linea2, linea3, l1, l2, Composite
```