Trading Rule: Moving Averages

0.1 Rule Description

This rule uses differentials between four moving averages to determine trade positioning. The parameters accepted are the integer length of each short average (2 parameters - one for price, one for research), the additional number of days for the longer averages (2 parameters - also, one for price, one for research) and 4 coefficients for each average's weighting contribution. The total sum is divided by the current price to calculate a position size.

0.2 Rule Parameters

Parameter Name	Default Value	Description	Symbol
Short price average length	2	Number of days in the short price average.	L_1^p
Long price average length	5	Number of additional days in the longer price average (added to the number in the short price average).	L_2^p
Short research average length	2	Number of days in the short research average.	L_1^r
Long research average length	5	Number of additional days in the longer research average (added to the number in the short price average).	L_2^r
Amplitude of short price average	1.0	Weighting coefficient for the short term average of price.	κ_1^p
Amplitude of long price average	1.0	Weighting coefficient for the long term average of price.	κ_2^p
Amplitude of short research average	1.0	Weighting coefficient for the short term average of research.	κ_1^r
Amplitude of long research average	1.0	Weighting coefficient for the long term average of research.	κ_2^r

0.3 Equation

$$\Lambda(t, L, \kappa, \zeta) = \frac{\kappa}{L} \sum_{n=0}^{L-1} \zeta(t-n) \tag{1}$$

$$z(t) = \frac{\Lambda(t, L_1^p, \kappa_1^p, p) + \Lambda(t, (L_1^p + L_2^p), \kappa_2^p, p) + \Lambda(t, L_1^r, \kappa_1^r, r) + \Lambda(t, (L_1^r + L_2^r), \kappa_2^r, r)}{p(t)} \tag{2}$$

where z_t is the portfolio allocation at time t, $p = p(t)$ is the value of the price series and $r = r(t)$ is the value of the research series.

Further Links

1. InferTrade: https://www.infertrade.com
2. Privacy Policy / Legal notice: https://www.infertrade.com/privacy-policy
3. InferStat Ltd: https://www.inferstat.com