

Predictive Relationship: Exponential Moving Average Trading Rule

Contents

1	Trading Strategy Description	2
2	Equation	2
3	Rule Parameters	2
1	Glossary	2

1 Trading Strategy Description

Exponential Moving Average (EMA) is a type of moving average similar to simple moving average, but it reduce the lag by applying more weight to recent prices. The weighting applied varies depending on the number of periods use in the moving average. Traders used this more to get a clearer view of the most recent price change of an asset.

2 Equation

$$EMA_t = \left(V_t * \left(\frac{S}{1+L}\right)\right) + EMA_{t-1} * \left(1 - \frac{S}{1+L}\right)$$
(1)

where:

EMA is exponentially weighted moving average.

 V_t is current stock value.

L is look back length.

S is the smoothing factor.

3 Rule Parameters

Below is a table summarizing the parameters specific to this trading rule.

Parameter Name	Default Value	Description	Symbol
Window size	50	This is the number of time steps over which exponential contribu- tions are sourced.	L
Smoothing Factor	2	Smoothing factor represents the weighting applied to the most recent period's value.	S

4 Glossary

- Bullish: Positive outlook on the market. Expectation of positive returns.
- Bearish: Negative outlook on the market. Expectation of negative returns.
- **Allocation:** The allocation is the fractional amount of the portfolios value used to determine the size of the trading position.
- Parameter: Value used by the trading rule in the calculation for trading position
- Trading Rule: Strategy to determine when to buy, hold or sell a position.

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