Moving Averages for Financial Data Smoothing

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Abstract

For a long time moving averages has been used for a financial data smoothing. It is one of the first indicators in technical analysis trading. Many traders debated that one moving average is better than other. As a result a lot of moving averages

have been created. In this empirical study we overview 19 most popular moving averages, create a taxonomy and compare them using two most important factors – smoothness and lag. Smoothness indicates how much an indicator change (angle) and lag indicates how much moving average is lagging behind the current price. The aim is to have values as smooth as possible to avoid erroneous trades and with minimal lag – to increase trend detection speed. This large-scale empirical study performed on 1850 real-world time series including stocks, ETF, Forex and futures daily data demonstrate that the best smoothness/lag ratio is achieved by the Exponential Hull Moving Average (with price correction) and Triple Exponential Moving Average (without correction).

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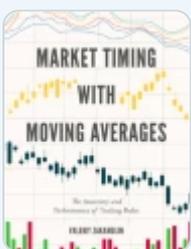Buy Softcover Book →

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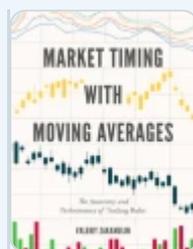
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