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Long Run Returns Predictability and Volatility with Moving Averages

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Abstract

The paper examines how the size of the rolling window, and the frequency used in moving average (MA) trading strategies, affect financial performance when risk is measured. We use the MA rule for market timing, that is, for when to buy stocks and when to shift to the risk-free rate. The important issue regarding the predictability of returns is assessed. It is found that performance improves, on average, when the rolling window is expanded and the data frequency is low. However, when the size of the rolling window reaches three years, the frequency loses its significance and all frequencies considered produce similar financial performance. Therefore, the results support stock returns predictability in the long run. The procedure takes account of the issues of variable persistence as we use only returns in the analysis. Therefore, we use the performance of MA rules as an instrument for testing returns predictability in financial stock markets.

Keywords Trading strategies, Risk, Moving average, Market timing, Returns predictability, Volatility, Rolling window, Data frequency.

JEL Classification C22, C32, C58, G32.

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