

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Måndagen den 27 januari kl. 16.00–17.00 presenterar Johannes Berglind Söderqvist sitt arbete “Monte Carlo Backtesting” (15 högskolepoäng, grundnivå).

Handledare: Salla Franzén och Karl Rökaeus

Plats: Sal 31, hus 5, Kräftriket

Sammanfattning: This paper explores the possibility of backtesting trading strategies using Monte Carlo simulation. An illustrative example is carried out by backtesting two strategies. The main strategy is the “Magic Formula”, introduced by Joel Greenblatt in his book *The Little Book that Beats the Market* from 2006. A randomized version of the Magic Formula is also backtested for comparison. The strategies are then compared to the chosen equally-weighted index based on the investable universe of stocks.

The results indicate that Monte Carlo simulation could be a fruitful way to backtest strategies over a shorter time period, no longer than one year. For the longer time periods employed the backtests did not provide any informative results. The Magic Formula strategy is intended for a holding period of three years or more so no relevant conclusions about its performance could be drawn using Monte Carlo simulation. The paper also contains some suggestions for future studies.

A description of the universe of investable stocks, the full code of the matlab-program and the results from the simulation are supplied in appendices.

Alla intresserade är välkomna!