



[Aims & Scope](#)

[Editorial Board](#)

[Instruction for Authors](#)

[Printed Copies](#)

[Partners](#)

[Referees](#)

[Contact us](#)

QUICKSEARCH

TABLE OF CONTENTS ALERT

Do you want to receive an email alert about new issue?

Email

Subscribe Unsubscribe

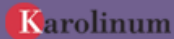
INDEXING

CEEOL DOAJ EBSCO EconLit RePEc

OUR SPONSORS



THE **EVROPAEVM**



VOLUME 1, ISSUE 1

[Home](#) > [Past Issues](#)

Heterogeneous Agents Model with the Worst Out Algorithm

[Vácha, Lukáš](#); [Vošvrda, Miloslav](#)

Year: 2007 Volume: 1 Issue: 1 Pages: 54-66

Abstract: Heterogeneous agents' model with the stochastic beliefs formation is considered. Fundamentalists rely on their model employing fundamental information basis to forecast the next price period. Chartists determine whether current conditions call for the acquisition of fundamental information in a forward looking manner rather than relying on the past performance. It was shown that implementation of the agents memory can significantly change the preferences of trader strategies. The Worst out Algorithm (WOA) is used with considered heterogeneous agents' model to simulate more realistic market conditions. The WOA replaces periodically the trading strategy that has the lowest performance level of all strategies presented on the market by the new one. The memory length of the new strategy that enters the market has the same stochastic structure as the initial strategies. This paper shows an influence of the agent memory as a stochastic process on the heterogeneous agents model with the WOA. Simulations show difference in price returns behaviour between two types of agents' memory length distribution functions (Uniform and Normal). There is a significant difference in the values of the Hurst exponent and the variance in these two cases. A lower Hurst exponent in the uniform case is caused by a richer spectrum of agents' memory length, because agents are equally distributed across all trading horizons. For the uniform case there is no opportunity for any prediction. On the other hand, the value of the Hurst exponent gives a signal for a possibility of the price prediction in the normal case.

JEL classification: C61, G14, D84

Keywords: efficient markets hypothesis, fractal market hypothesis, agents' investment horizons, agents' trading strategies, technical trading rules, heterogeneous agent model with stochastic memory, worst out algorithm

RePEc: http://ideas.repec.org/a/fau/aucoz/au2007_054.html

[DOWNLOAD](#) [\[PDF\]](#)

[Print](#) [Recommend to others](#)