Referee report on (MS 382)

"Disclosure requirements, the release of new information and market efficiency: new insights from agent-based models" by Oliver Hermsen, University of Bamberg

Björn-Christopher Witte, University of Bamberg

Frank Westerhoff, University of Bamberg

This paper studies the effect of the frequency of news release on the market efficiency. The authors find that the market efficiency increases in the frequency of the information releases. As a result, policy makers should regulate firms' disclosure requirements accordingly.

The paper studies an important issue within the framework of agents' based models and its result is interesting. Nevertheless, I have several remarks that could improve the paper. I believe that with suitable changes this manuscript is a good candidate for a publication in the ejournal Economics.

## **Major points:**

- 1. The study is based on 3 different agents' based model. What is exactly the objective of using all of them? Robustness? Wouldn't it be more appropriate to use the best available model? The authors claim that all the 3 models replicate well the financial markets' regularities. However, Figure 3 showing the results of simulation of the asset pricing model by Chiarella, He and Hommes (2006a and 2006b) does not seem to display volatility clustering while the other two models do. Could the authors elaborate on it and motivate better their strategy?
- 2. The empirical study summarized on pages 13-15 is somewhat thin relative to the theoretical part exposing the proposed models. In particular, it explains only very briefly the way the simulation has been designed. Several issues could be clarified. First, does this section use actual data? This is suggested by the paragraph on the German stock market on p. 13. If this is the case, what kind of data is used in the study? Second, what are the parameterizations of the simulated/calibrated models? This could be summarized in an adequate table. The same holds for the results. Could some quantitative results be presented to support the findings of Figures 5-7?
- 3. The authors find that the frequency of the news publication has no effect on the volatility. I find this result puzzling, especially given the finding that the objective distortion increases in the frequency of news release. Could the authors explain this puzzling result?
- 4. One of the findings of the paper is that in Franke and Westerhoff's (2009a and 2009b) model the deviation from the fundamental does not considerably decrease in the TIGs increases. This is in contrast with the two other models.

Could the authors explain why we observe this difference? How is this model different from the other two?

## **Minor points:**

- 1. I would suggest more caution with the policy recommendation, given the very early stage of this type of research line.
- 2. On p. 3 the authors argue that they observe in all 3 models that *prices are* closer to fundamental values if investors are informed in good time. Could the authors provide the definition of good time?
- 3. On p. 9 the authors note that some of the extreme price movements occur simultaneously with the release of new information. Could the authors provide some intuition for this result? Does it imply higher volatility in contrast to the previously mentioned result?

## References

Chiarella C., He X.-Z. and Hommes C. (2006a) Moving average rules as a source of market instability. *Physica A*, 370, 12-17.

Chiarella C., He X.-Z. and Hommes C. (2006b): A dynamic analysis of moving average rules. *Journal of Economic Dynamics and Control*, 30, 1729-1753. Franke, R. and Westerhoff, F. (2009a) Validation of a structural stochastic volatility

model of asset pricing. *Working Paper, Universities of Bamberg and Kiel.* Franke, R. and Westerhoff, F. (2009b) Estimation of a structural stochastic volatility

Franke, R. and Westerhoff, F. (2009b) Estimation of a structural stochastic volatility model of asset pricing. *Working Paper, Universities of Bamberg and Kiel*.