Report on MS 382 Hermsen et al: "Disclosure requirements, the release of new information and market efficiency: new insights from agent-based models."

This paper uses an agent-based modelling approach to motivate increased transparency in the financial sector. The timely underlying message is that continuous disclosure of information by firms can lead to a general decrease in financial risk as measured by the tails of the distribution of returns. After a thorough introduction and discussion of the theoretical background analysis is by Monte Carlo simulation of three agent-based models, so the findings are not tied too closely to a particular choice of market model. The work adds to an extensive literature on the application of agent-based models to policy measures and adds also to an impressive list of contributions by Westerhoff and co-authors. As such the work appears well-motivated, with an appropriate place in the literature, and the review of the literature in Section 1 is interesting and informative. Other attractive features of the work are the elegant formulation of objective fundamental value as a random walk and an intuitive discussion of the tail index on page 7. There are however a few simple changes I would like to see before the work is formally published.

Modifications

- I think somewhere, e.g. Page 3, there should be a small footnote about the British banking crisis and non-disclosure of the size of government loans to stricken banks. This would seem to be at odds with the paper's basic underlying message of increased transparency leading to greater financial stability. I would not like to constrain the authors to closely here but I feel failure to address this point, at least in passing in a footnote, leaves the authors open to unnecessary criticism about the relevance of the article.
- I think there is a very poor sentence on Page 3, see below, which the authors should modify, essentially being a bit more guarded and humble about what exactly they are claiming.

Offending sentence
"Since their main building blocks are also based on empirical observations they can be considered validated."

Again I do not wish to constrain the authors too much here. I would suggest deleting this sentence or make a simple modification along the following lines - namely move the word empirical to the previous sentence, for emphasis, and move the material in the footnote to the main text. In particular, I would suggest something along the lines of

"All these models are able to match, at least approximately, the stylized empirical facts of financial markets. We use the above models with the parameter settings originally proposed. The only component we modify is the market participants' perception of fundamental value."

- Page 16 point 4. The authors should be specific that the two items being referred to are the Lux-Marchesi model and the temporal information gap. There are two sentences which should be modified along the lines of the following.

"In particular, in the Lux-Marchesi model the probability of extreme returns is maximised if firms release information on a quarterly basis. The effect of the temporal information gap depends on how closely market prices track subjective fundamental values."

Minor comments and suggestions to the authors

There are a couple of minor points I would like to make which the authors might like to consider but can act on or ignore as they feel appropriate.

- Page 5. It seems a little weak not to give more information than that contained in the footnote though I accept this may be needed for reasons of brevity.
- Page 6 paragraph underneath equation (1). Consider adding to the final line of this paragraph
  "and the market is less efficient"
- Page 7. Move the footnote to the main text?
- Figure 3 caption. Unclear as to what the parallel straight lines are in the bottom two panels

  The standard of English in the article is generally very good but reads a little strangely in a couple of places

- Section 4.2 second sentence. Suggest
  "We do not observe any significant influence of the TIGs on volatility."

- Section 4.4 second sentence. Suggest
  "The model confirms the previous findings that TIGs do not influence volatility."