Comments on "Unemployment benefits and financial factors in an agent based macroeconomic model" by Luca Riccetti, Alberto Russo and Mauro Gallegati

Based on an interesting, detailed and also powerful agent-based macroeconomic model, this paper shows that unemployment benefits may, under some conditions, help to stabilize aggregate demand and thus the whole macroeconomic system. I enjoyed reading this stimulating paper and believe that it deserves publication in Economics – The Open-Access, Open-Assement E-Journal.

I have a few suggestions which may help the authors to improve their paper.

- Title: I found the term “Financial Factors” in the title of the paper too unspecific, i.e. not informative enough. What does it refer to? The financial situation of business firms or the (active) role played by the central bank in the policy experiments. I thus suggest to modify the title of the paper such that it is immediately clear for the reader.
- Page 1, line 3: Here we have “Riccetti et al. (2012)” while in the references it is “2011”. See also page 4, line 1 and so on.
- Page 3, line 4 from below: “whch” should be “which”.
- Page 4, paragraph starting with “Many papers …”: Besides citing the more policy related papers it may make sense to mention some other (general) agent-based macro models, such as “Deissenberg, C., van der Hoog, S. and Dawid, H. (2008).'EURACE: A Massively Parallel Agent-based Model of the European Economy. Applied Mathematics and Computation, 204, 541-552”, “Haber, G. (2008): Monetary and fiscal policy analysis with an agent-based macroeconomic model. Jahrbücher für Nationalökonomie und Statistik, 228, 276-295“ or “Lengnick, M. (2013): Agent-based macroeconomics: A baseline model. Journal of Economic Behavior and Organization, 86, 102-120” just to help the interested reader to get an overview over the field. Of course, there are many more papers one could cite here. In addition, two other papers on the use of agent-based models as tools for economic policy design include “Westerhoff, F. and Franke, R. (2012): Agent-based models for economic policy design: two illustrative examples. BERG Working Paper No. 88, University of Bamberg” and “Westerhoff, F. (2008): The use of agent-based financial market models to test the effectiveness of regulatory policies. Jahrbücher für Nationalökonomie und Statistik, 228, 195-227”.
- Page 5, beginning of Section 5: I suggest to recall once again that the model is related to Riccetti et al. Moreover, replication of agent-based model results becomes more and more important. Did you think about adding your computer code to the Appendix? One nice feature of e-journals is that space is not really restricted! Could be a good idea …
- Page 5, line 3 from below: “After” should be “Afterwards”.
- Page 8, eq. 7: I suggest to explain (7) a bit more in detail and to recall what p_hat is.
- Page 9, eq. 9: I suggest to recall what n_ft stands for.
- Page 12, Section 2.6: The point which worries me most with this paper is that the role played by the central bank is not clear enough. What exactly does it mean to reduce the gap in the credit market? I suggest to give an equation which formalizes the behavior of the central bank. In the first paragraph of Section 3 it is said that the central bank sets its interest rate to 1 percent and does not change it. Then this implies that, over the business cycle, the central bank plays a rather active role during your policy experiments in the sense that it provides a lot of liquidity to the credit market, right? Please clarify this. Is this realistic?
- Page 13, Figure 1: You may want to add some more panels to Figure 1 to illustrate the functioning of your model. Why don’t you add other macro variables?!
- Page 16, Table 2: Here the average interest rate is reported with roughly 9 percent (no unemployment benefits) and 7.6 percent (unemployment benefits). Is this the interest rate given by eq. 4? Since the central bank charges only 1 percent I wonder whether these averages may be regarded as realistic. It is also interesting to see that nominal/real interest rates are decreasing while employment and thus production increase.
- Section 4.2: The sensitivity analysis is limited to parameter n. I don’t want to overstress the issue with the central bank but what about doing some robustness checks here? Is it possible to add a Taylor-type interest rate rule instead of the constant interest rate rule?!
- Page 26, Reference 46: The publication year is missing.