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Report of Referee
Credit money and macroeconomic instability in the agent-based model and simulator Eurace

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General comments
The aim of the paper is to understand output and prices variabilities using an agent based macroeconomic simulation platform. The paper is well written and the analytical framework is generally correct, but it is significant if we consider it just as a good computational exercise, using a simulation instead a macroeconometric one. The conclusions are mostly trivial and the potential of the agent based model is not exploited. Moreover on a political economic bases, it doesn't seem to capture one of the features considered in the paper, relate to the critical business cycle we are facing nowadays.
I suggest the publication taking into account the goals of the issue in which might be published.
Below some specifications.

Formal suggestions:

Pag. 3 line 10 see ? what or who?
Pag. 7 11 CGfims it is better to explicit the acronym as done for IGFirms
If it is not requested by formatting rules, for an easy reading of the paper it could be better insert the figures in the pages where are cited. For example fig. 2 should be inserted on page 12, not in pag. 14, because it is too far from verbal description. The same for the fig 1. In addition, it is not clear to me if these figures are are plotted with or not QE, this point is not clear. If they are plotted with/without QE, it could be interesting also to see the plotting without/with QE. Of course, starting from the same initial conditions (d=0.6; d=0.9)

Substantial suggestions.
The idea of the paper is to use an agent based macroeconomic simulation platform to understand the effect on economic instability as consequence of agents decisions making. In particular for:

- **A)** "...understanding of output and prices variabilities..." arose by

- **B)** "...decision about dividends payment by the firms....", using Eurace an agent based macroeconomic simulation platform defined

- **C)** "....the first successful effort to build a complete economy that integrates all the main markets and economic mechanisms which exist in the real world" focusing on

- **D)** "....the interactions between the real and the financial sides of the economy...".

- **E)** "...A clear and important empirical evidence that emerges from the path of GDP is that the EURACE model is able to exhibit endogenous business cycles. The main source of the observed business cycles is the strict relation between the real economic activity and its financing through the credit market..."

Comments:

- **A)** The variability of output and prices is determined by the increasing stock of money in the economy. In general dividends payment means many money, the agents in the system are richer, so that means arising production, reduction unemployment and following the traditional theory more inflation. These are trivial conclusions.

B) The authors conclude that this fact is the source of endogenous fluctuations. The higher monetary endowment due also to the dividends payment produce an increasing of GDP, because this means that agents use this money to buy more goods, so an increase of real demand. The consideration of authors about the fact that "....higher demand that not necessarily translates into a higher real demand...", is not true at all. See Blanchard Macroeconomics 2006 to follow the adjustment mechanism.

C) Eurace is presented as a fully integrated macroeconomy because considers the real market, the financial market and the public sector. Which is the novelty?. If we consider the IS-LM model and AS-AD model they are based on the same hypothesis. Which are the difference about the macroeconometric models like DRI, COMPACT, EPA and so on (see Blanchard 2006)

D) Moreover it is highlight that Eurace is agent based, but are not specified how are these agents (1000 households), how their behaviours are formalized. On page 3 the authors say that the modelling of agents behaviors and the modelling of markets protocols are empirically inspired by the real world, that's? just "...bounded rationality, limited information gathering and storage capacities, and limited computational capabilities of the economic agents..."? If yes, in which way these assumptions are formalized? It seems that this simulation platform is used just to manage the computational complexity (1000 households, 10 consumption goods, and so on...).

E) The focus of this point is that money influences income and the credit money determines endogenous business cycle. On this point I would suggest the following readings o look an eyes the work of Friedman, M. e A. Schwartz (1963), A Monetary History of the United States, 1867-1960, and Tobin, J. (1970), "Money and Income: Post Hoc Ergo Propter Hoc?",Quarterly Journal of Economics, no. 2, 301-17.
Moreover, any considerations have been made about the labour income, that's in which way contributes to define the household wealth, and about households saving considering that in their balance sheet there are equity shares. How are they bought? Using only the dividends paid by firms?