## Unemployment Benefits and Financial Factors in an Agent-Based Macroeconomic Model

## **Reply to Reader**

We want to thank the reader for useful comments and suggestions.

We will try to briefly reply:

- I do not understand why whenever a firm experiences negative profits they are subtracted both from its net worth and to its next period profits

It is wrongly explained. Negative profits can be subtracted in the computation of the taxes that should be paid in the next period, not from the profits. So there is not a double subtraction of negative profits in the model.

- how is the net worth of new banks generated?

Net worth of new banks is a random number around a multiple of the cost of the medium price of a good. The money is taken from households (subtracted from banks and firms dividends). So, there are not flows of money coming from outside our artificial economy.

- I would suggest to show the Montecarlo standard errors in Table 2 in order to reinforce the conclusions of the paper. My guess is that the reduction in the unemployment rate is statistically significant, whereas the increase in public deficit and inflation are not.

Thanks for the suggestion.

- with the introduction of the unemployment benefits, do crises still appear as in the benchmark scenario? My guess is no and this should support the case for the introduction of the unemployment benefits.

Right observation. This is the case considering our definition of big crisis scenario (mean unemployment rate above 20%). Indeed from table 2 you can observe that all 1000 simulations are present in the last column.

## possible extensions:

- assessing the role of public employment and its interaction with the presence of unemployment henefits
- studying the impact of different Taylor rules for fixing the Central Bank interest rate
- studying the macroeconomic consequences when the Central Banks does not pursue accommodating policies

Thanks for these proposals. We will study the impact of a Taylor rule, as also suggested by referee 1. The two other suggestions are also very interesting and could be implemented in future developments of the model.