

This paper discusses pros and cons of using empirically calibrated agent-based models for policy purposes, with a particular attention to the role of uncertainty. Uncertainty is discussed in terms of information, behavior and strategic interaction. Problems of network and dynamic efficiency are also considered, with the aim of informing policy in complex situations.

The paper is well-written and informative and so I am supportive of its publication. However, I would like only to raise authors' attention to a couple of details.

The strengths of the paper are as follows: (i) it provides a complexity-friendly perspective on the use of models in policy making; (ii) it includes an informative excursus on methodological implications of using ABMs for policy purposes; (iii) it gives a comprehensive analysis of pros and cons of modeling complex systems when dealing with different sources of uncertainty; (iv) it can stimulate further applications of ABM in the policy domain.

The weaknesses of the paper deals with the lack of references to important literature on two important points. While this does not disqualify the quality of this contribution all in all, I would suggest authors to consider these points. First, when discussing uncertainty due to interaction effects, the authors correctly argued that part of the problem is due to the fact that economic agents can (partially) anticipate other agents' strategies and this can dramatically affect the predictability of outcomes and so is part of the deep uncertainty that dominates each policy scenario. While this is part of standard game theory, according to behavioural game theory (see Gintis H. 2009 *The Bounds of Reason: Game Theory and the Unification of the Behavioral Sciences*, Princeton University Press, NJ), this also paves the way to considering agent strategies not only as "rational, self-interest" but as "rationalisable", given to this a more open and rich account of agent rationality. Norms, emotions can be part of the rational strategies played by agents and so can also be triggered by policy stimuli (e.g., think to the nudge approach to policy, e.g., Sharif E. (eds) 2012 *The Behavioral Foundations of Public Policy*, Princeton University Press, NJ.). A nice extension could be to consider more behaviourally informed policy literature, as this can provide a richer account of what can happen, and also be achieved, when economic agents are not strictly viewed as rational utility maximisers. Shortly, I did not find this paper tuned on the recent advances in behavioural sciences, while this is important also for their line of reasoning.

Secondly, when authors discuss the potential advantages of ABM for policy making, I found not enough detail on the conventional approach. Standard economists have not only a primacy due to their political influence and disciplinary prestige. They also provide simple recipes to complex problems. Even their models are a "black box", to mention a concept used to criticize ABMs by the authors. This is not a problem of ABMs, in my opinion, given that also standard DSGE models can be viewed as a black box by policy makers who might be unfamiliar with the sophisticated theory behind. The problem is that ABMs aim to provide a richer account on how complex economic systems work and sometimes it is difficult to come to simple prescriptions, while they are superior in principles in providing visualizations of system behavior and testing/experimenting policy options in probabilistic scenarios.