## **Economics 2018**

Money Circulation and Debt Circulation: A Restatement of Quantity Theory of Money

The introduction of the paper looks promising as it deals with a wide and eclectic variety of interesting papers and ideas.

This all comes to a stop when at the very beginning of section 2, when the theory of money creation, attributed to Werner and Mcleay et al., is being described as equation (1), where the aggregate amount of money is being said to be a multiple of the quantity of base money, with a reference to the traditional fractional reserve theory of banking. Rather than rejecting this approach, as do Werner and Mcleay et al., it seems that the author simply wish to amend it, by making the multiplier a function of what happens with debt repayment. The feeling that this is simply an amendment of traditional theory is reinforced by the fact that the authors pay much attention to a modified version of the quantity theory of money.

On page 10, of their paper, the authors affirm that: 'The commercial bank could only lend out its excess reserves to the traders, so the amount of loanable funds depends on the gap between the amount of reserves initially issued by the central bank and the required reserves, which could be obtained by multiplying the actual volume of deposits and the required ratio'. This would then mean that the causality goes from reserves to deposits and credits, and thus this reverses the causality as described by Werner and McLeay and several other heterodox authors. Thus the starting assumption of the model, in my opinion, is wrong, and hence the paper cannot be salvaged.

The rest of the paper presents an exercise in money velocity, with an agent-based model that appears to be rather rudimentary compared to existing models, and hence it does not appear to be truly innovative.