

## Comments on

### *Seigniorage*, by Willem Buiter

#### **SUMMARY**

This paper explains the related phenomena of seigniorage, central bank revenue, the inflation tax and the operating profits of the central bank with a simple model. The author does so by analysing separately the intertemporal budget constraints of the central bank and the Treasury. The split of budget constraints for fiscal and monetary policy has some implications for the feasibility of inflation targeting by the central bank. This leads to a reconsideration of the interaction between the central bank and the Treasury, in particular in case of a crisis in the financial sector, or in case the economy gets stuck in a liquidity trap.

#### **ASSESSMENT**

The paper gives a very clear presentation of the different concepts of seigniorage that have been around in the literature, and puts a good structure on it. For this reason alone, I would already recommend the beginning of section 2 of the paper as a standard for the literature to adopt.

I have a few remarks on the further development of this section, however.

First, I did not find very enlightening the discussion of Proposition 2 and its corollaries. I think these results are given too much importance. The discussion of various models that are based on the assumption that output growth is exogenous are a good starting point, but they are not very realistic. The author also acknowledges this the immediately afterwards. Nonetheless, the discussion of the various macro-economic models is not rather stylised. I would like to see a better confrontation of the various traditions in macro-models. Eventually, why not go directly for a fully specified dynamic macro-economic model in which the feedback channels of monetary policy can be introduced? This would perhaps be more standard.

Second, Proposition 2 reminded me of the discussion in Woodford (2003) on time-consistent

policy. Why would the central bank realise it should maximise the present discounted value of current and future revenue only in period 1? What is so specific about this period? Could the central bank not (in a more worked out model) have interest in reoptimising every period again? I have the impression of missing something about the period 1, perhaps because of the usage of the *'real time'* terminology. This is a little confusing for people accustomed to Orphanides' meaning of monetary policy decisions in real time. I do not really understand what is meant with *'real time'* in this case.

Third, I find the discussion from pages 14 to 16 not very insightful and too long. I would get from the previous proofs the same intuition. This discussion can be easily skipped.

In Section 3, the author makes a very useful distinction between the budget constraints of central bank and Treasury. This leads to some very useful insights into the effects of central banks using fiat money, and the exact channels of interaction between both monetary and fiscal policy makers. Assuming a complete split of fiscal and monetary policy may at first sight be rather provocative. Perhaps some references to some other branches of the literature could be useful here to guide the reader. This would make clear the difference between the author's approach and for example, the game-theoretical interactions between monetary and fiscal policy (à la Dixit-Lambertini), or the Fiscal Theory of the Price Level. In addition, this would be helpful to eliminate some doubts that arise about the choice to treat monetary and fiscal policy separately. In particular, one wonders if summing the two budget constraints with their respective restrictions, would lead to similar results as if one were to consider the consolidated budget constraint. I.e., the assumption of two budget constraints the possibilities rules out the use of the instruments of the other policymaker to satisfy the own budget constraint by construction. But one wonders if this does not inadvertently exclude some other solutions? Would this still lead to the same conclusions about policy interaction? One gets the feeling of recognising other results of the literature, but there is no confrontation of the main result with these other approaches.

### **SOME ADDITIONAL REMARKS**

- p. 17. why introduce a set of accounts for a small open economy? What is the need for introducing here a small open economy, when the rest of the paper (mostly) discusses a closed economy?
- p. 25. ...*(the maximum value ... high rates of inflation.*  
Is this not another way of arguing for monetary intervention in the style of the FTPL?

- about policy interaction in general: what are current practices in industrialised countries for treating central bank profits? Are these usually taxed away, or handed over to the government? Some data would be useful here.
- about policy interaction in general: we do indeed observe that central banks become more independent from the Treasury. From a positive point of view, could we use the analysis here to understand why this has become the norm in industrialised countries?
- p. 44. *Proposition 5*:  
is this not a similar implication as that of the FTPL?
- p. 45. is the solution of money dropping by a helicopter via the central bank not just a more complicated way of achieving the result? Deficit and debt creation by the Treasury would just have a similar effect. In this case, we would read it as the central bank stepping in to bail out the government. Perhaps the formulation is focused too much on the central bank – which would give the order to the government – in the paper. That is just a mere point of view, I would think. In a similar sense, the argument of Sargent and Wallace (1981) can be overturned easily to argue for an ‘Unpleasant Fiscal Arithmetic’ as King (1998) already argued.

## REFERENCES

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