

Discussion of 'Macroprudential Interventions in Liquidity Traps' by

William Taylor and Roy Zilberman

Joe Pearlman

City, UoL

21 June 2019

Ingredients of the Model

- Cash-in-Advance – generates the need for money
- Firms borrow to pay wages – cost channel effect
- Banks intermediate between consumers who save, and firms who borrow
- Intermediate good firms produce using labour only and are hit by idiosyncratic shocks.
 - This leads to potential default
 - Such shocks are encountered in Bernanke, Gertler and Gilchrist (1999) and Quint and Rabanal (2014)
- There are inflation costs via price dispersion and Calvo contracts

Policy Variables

- Interest rate R^D which is the rate paid to depositors
- Tax rate τ^D on gross returns to depositors subject to $(1 - \tau^D) R^D \geq 1$
- τ^D is referred to as a macroprudential intervention, although it seems more like a fiscal stabilization instrument.
- Note that the lending rate R^L to firms takes into account the probability distribution that leads to firm default.

Liquidity Trap

- This arises from nominal interest rates not being able to fall below 0 (the ZLB constraint).
- The results that are generated arise from a drop in demand due to a sudden shock Z to the discount factor. It affects current consumption via the Euler equation.
 - A small such drop in demand is dealt with by a drop in the interest rate
 - A much larger drop runs into the ZLB constraint for the interest rate.
- The solution is obtained using Occbin and verified using Tom Holden's software

Benefits of τ^D

- Eliminates the pure monetary policy trade-off that is induced by the cost channel (or working-capital) constraint
- Thus it can induce a first-best allocation – inflation = 0, output = its RBC value – when there is no liquidity trap.
- At the ZLB:
- Raising the tax rate by a higher proportion than a raise in the interest rate will lower the effective savings rate, inducing increased consumption, and therefore can get round the ZLB problem. But it is not clear to me that starting at the ZLB, this does not violate $R^D (1 - \tau^D) > 1$.
- (However, in the simulations the diagrams do not make clear that effective nominal R^D is just $R^D (1 - \tau^D)$.)

Suggestions for the Paper

- Given the use of Occbin, I didn't understand the need to reference Adam and Billi (2006, 2007).
- You might find (surprisingly) that you can generate analytic results more readily if you use a log-normal distribution for the idiosyncratic shocks.
- The LQ setup that you use depends on a fictitious fiscal subsidy, and these days one rarely encounters it in the literature. Much more plausible, is just to say that this is reasonable as a mandate for the central bank.
- Just use the commitment rule as a benchmark against which to measure all other policies, rather than as a desirable rule. Most macroeconomists do not take commitment rules seriously because
 - in general they are so complicated.
 - In addition, there are an infinite number of ways of representing the commitment rule in feedback form (when the system has forward expectations). It takes a very long time to ascertain that a policymaker is actually using an optimal commitment rule, because you can only check using the path of the variables; you can't test the values of the feedback parameters since they won't in general converge to anything.