Xavier Ragot
OPTIMAL MONETARY POLICY IN A LIQUIDITY TRAP WITH HETEROGENEOUS AGENTS.
Discussion.

Patrizio Tirelli (Università degli Studi Milano - Bicocca)

September 2016

Paper motivations

- Transmission mechanism of monetary policy at the ZLB not well understood

The model is crafted to identify the optimal monetary policy in response to a deleveraging shock that drives the nominal interet rate at the ZLB.

Paper motivations

- Transmission mechanism of monetary policy at the ZLB not well understood
- Redistributive effects of monetary policy

The model is crafted to identify the optimal monetary policy in response to a deleveraging shock that drives the nominal interet rate at the ZLB.

Paper motivations

- Transmission mechanism of monetary policy at the ZLB not well understood
- Redistributive effects of monetary policy
- Open market operations vs money transfers

The model is crafted to identify the optimal monetary policy in response to a deleveraging shock that drives the nominal interet rate at the ZLB.

Paper motivations

- Transmission mechanism of monetary policy at the ZLB not well understood
- Redistributive effects of monetary policy
- Open market operations vs money transfers
- LAMP

The model is crafted to identify the optimal monetary policy in response to a deleveraging shock that drives the nominal interet rate at the ZLB.

$$c_t^n = \frac{m_{t-1}^n}{1+\pi_t} + \tau_t + q_t d_t$$

$$m_t^n = 1 + \tau_t - d_{t-1}$$

$$q_t d_t + b_t^g + m_t^p + c_t^p = 1 + \tau_t + d_{t-1} - \frac{b_{t-1}^g}{q_{t-1}} - \frac{m_{t-1}^p}{1+\pi_t}$$

$$U'\left(c_t^p\right) = \frac{\beta}{q_t} U'\left(c_{t+1}^p\right)$$

$$c_t^p + c_t^n = 2$$

The first best is achieved if the real interest rate $\frac{1}{q}$ and the permanent income of P-households are insulated from the shock. In that case price flexibility also ensures that c^n is also optimal.
This involves "actions" throughout the ZLB episode and after its end, because N-households who do not consume enter the new "normal" phase with too little debt.
Open market operations vs money transfers: there is an intertemporal dimension concerning the post ZLB phase which is precluded to transfers.
Proposition 1 in the paper: optimal money transfer zero when ZLB not binding.

OMOs
- raise the unit value of debt when ZLB binds by exhacerbating initial deflation.
- inflate the economy when ZLB ends.
Initial deflation stabilizes the consumption of N-households.
During the ZLB period $q_t = \beta$, $d < d^*$

$$c^n_{t,ZLB} = \frac{m^n_{t-1}}{1 + \pi_{t,ZLB}} + \tau_{t,ZLB} + qd$$

Stability of $c^n_{t,ZLB}$ requires that real money holdings and fiscal transfers compensate for $d < d^*$
At the end of the ZLB period inflation undoes the effects of previous policy actions on fiscal transfers and on money accumulation of N-households

$$c^n_{t,NOZLB} = \frac{m^n_{t-1}}{1 + \pi_{t,NOZLB}} + \tau_{t,NOZLB} + qd_{t,NOZLB}$$

- Novel result. short-run deflationary plus log run inflationary policies stabilize the economy.

- Novel result. short-run deflationary plus log run inflationary policies stabilize the economy.
- Bold result: should we fear deflation episodes? Central Banks do!

- Novel result. short-run deflationary plus log run inflationary policies stabilize the economy.
- Bold result: should we fear deflation episodes? Central Banks do!
- Key hidden assumption: relative price of endowment unaffected by deflation. Deflation is bad for those who have accumulated debt. Here it is neutral

$$m_t^n = 1 + \tau_t - d_{t-1}$$

- Novel result. short-run deflationary plus log run inflationary policies stabilize the economy.
- Bold result: should we fear deflation episodes? Central Banks do!
- Key hidden assumption: relative price of endowment unaffected by deflation. Deflation is bad for those who have accumulated debt. Here it is neutral

$$m_t^n = 1 + \tau_t - d_{t-1}$$

- Helicopter money is considered when other forms of QE do not seem to work.

- Novel result. short-run deflationary plus log run inflationary policies stabilize the economy.
- Bold result: should we fear deflation episodes? Central Banks do!
- Key hidden assumption: relative price of endowment unaffected by deflation. Deflation is bad for those who have accumulated debt. Here it is neutral

$$m_t^n = 1 + \tau_t - d_{t-1}$$

- Helicopter money is considered when other forms of QE do not seem to work.
- Limits of QE-OMOs: banks more liquid, credit flows remain sticky.