

Discussion of "Asset Purchases and Default-Inflation Risks in Noisy Financial Markets" by Carlo Galli and Gaetano Gaballo

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Background

The problem with quantitative easing is that it works in practice, but it does not work in theory (B.Bernenke, 2014)

- Segmented Markets: Gertler & Karadi (2011), Gertler & Karadi (2015), Sims & Wu (2021).
- Models with exogenously incomplete markets: Cui & Sterk (2021), Lee (2023).
- Preferred Habitat: Greenwood & Vayanos (2014), King (2013,2019), Hamilton & Wu (2012), Costain et. al. (2022).
- Information and commitment to future policies: Jeanne Svensson (07), Bhattarai et. al. (22), Iovino Sergeyev (21).

This paper: dispersed information story following Hellwig et. al. (2006), Albagli et. al. (2021), Bassetto and Galli (2019) etc.

- Efficient under monetary dominance.
- Inefficient under fiscal dominance.

Setting

- Agents:

- Private signal about market fundamental: $x_m = \theta + \sigma_x \zeta_i$, where $\zeta_i \sim N(0, 1)$.
- Strategy:

$$R\mathbb{E}(\theta|x_i, R, b_{cb}) \begin{cases} > 1, \text{ then } b_i = \bar{b}_i \\ = 1, \text{ then } b_i \in [0, \bar{b}_i] \\ < 1, \text{ then } b_i = 0 \end{cases}$$

- Bonds market clearing:

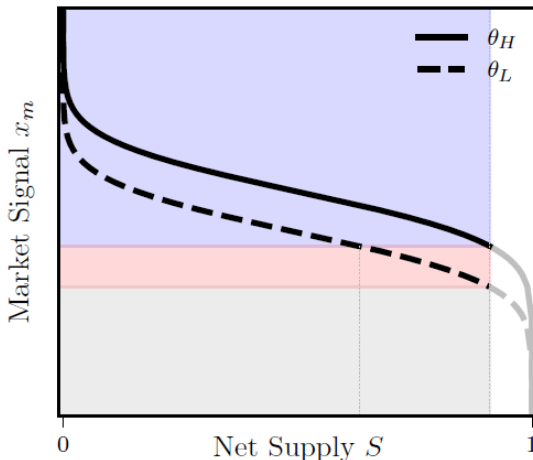
$$\int_0^1 b_i di + b_{cb} = \tilde{S}$$
$$\Phi\left(\frac{\theta - x_m}{\sigma_x}\right) = \frac{\tilde{S} - b_{cb}}{\bar{b}_i}$$

- Solve for the equilibrium cutoff signal:

$$x_m = \theta - \sigma_x \Phi^{-1}\left(\frac{\tilde{S} - b_{cb}}{\bar{b}_i}\right)$$

CB asset purchases reveal the fundamental

$$x_m = \theta - \sigma_x \Phi^{-1} \left(\frac{\tilde{S} - b_{cb}}{\bar{b}_i} \right)$$



Conclusions Under Fiscal versus Monetary Dominance.

- Are AP always welfare improving under monetary dominance?
 - Taxes are not distortionary, otherwise AP inefficient under both regimes.
 - Households need to pay for central bank losses. Does it matter who pays for the loss? How those losses depend on $\tilde{S}$, σ_x etc.?
- What is the storage technology?
 - Savers can only save in money, which drives the fact that AP are inefficient under fiscal dominance.
 - GE: what if this other asset was money and showed up in the CB balance sheet and AP were financed by issuing money?

Empirical Relevance

- How important is dispersed information relative to other channels?
 - Can look for anecdotal evidence of what people talk about in FOMC meetings.
 - Are there any facts that the model can explain?
- Is the default risk that relevant in the US? Or inflation=default in this model?
 - Could just focus on a specific country where government default risk was relevant, say Greece or Spain or other. Could the model explain bond spreads in these countries? Maybe QE had differential effect on spreads in these countries?

QE and Welfare

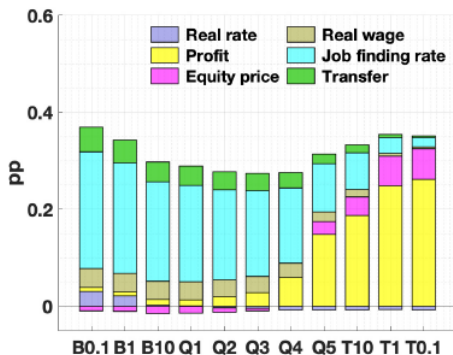
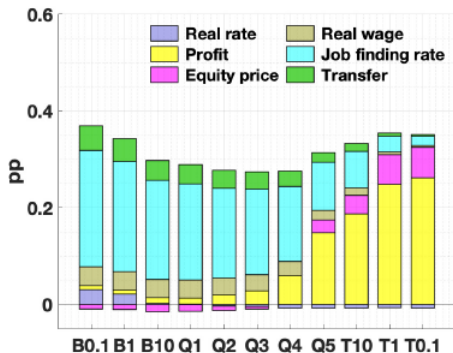


Figure: Welfare effects of QE, Lee (2021)

QE and Welfare



- Changes in bond yields have direct effect only for a small share of the population whose consumption is not very responsive to income changes.
- Direct effects can affect some part of the population negatively, but indirect effects may be positive and dominate.
- Is it possible to find conditions when AP improve welfare of all agents?

Figure: Welfare effects of QE, Lee (2021)

Nice project! Good luck!