Discussion of "The Interdependence of Monetary and Macroprudential Policy under the Zero Lower Bound"[1]

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[1] Disclaimer: These slides represent the authors' views and do not necessarily represent those of Banco de España or the Eurosystem.

Outline

Introduction

- Financial crisis has brought *financial stability* concerns to the forefront
- Key policy questions:
  - should **monetary** policy target financial stability (in addition to *price stability*)?
  - should it be dealt with by **macroprudential** policy instead (leaving mon. pol. to focus on inflation)?
- Optimal *joint* design of monetary and macroprudential policy is thus a crucial research area
- This paper contributes to this area...
- ... by analyzing the interdependence of monetary and macroprudential policy at the ZLB

Framework

- New Keynesian model with
  - nominal debt and Fisherian channel
  - financial frictions *à la* BGG (debt contract as in Carlstrom, Fuerst & Paustian, 2014)
  - banks subject to minimum capital requirement
- Monetary policy: ZLB-constrained Taylor rule
  - possibly augmented with credit gap (*lean against the wind*, LATW)
- Macroprudential policy: (constant) mimimum capital ratio
  - possibly augmented with credit gap (countercyclical capital buffer, CCB)

Findings

- Determinacy (for given steady-state policy targets)
  - CCB coefficient must be above certain threshold for Taylor principle ($\tau_\Pi > 1$) to be satisfied
  - LATW always requires violating the Taylor principle
- Effect of steady-state targets on determinacy
  - Inflation target does not affect the determinacy region
  - A higher capital requirement enlarges the determinacy region consistent with Taylor principle
- Effect of ZLB on impact of risk shock
  - Severe effect under CCB and active monetary policy ($\tau_\Pi > 1$)
- Optimal simple rules:
  - Standard Taylor + CCB rule clearly superior to LATW

Outline

Praise

- Authors tackle a very important question ...
- ... in a rigorous and suitable framework
- The (preliminary) results are interesting

Comments

- Mostly on the specification of **macroprudential policy**
  - Steady state bank capital requirements
  - Cyclical adjustment
- Implications for **normative** and positive analysis

Macroprudential policy: steady-state

- Authors *assume* a steady-state minimum bank capital requirement (ϕ)
- **What is the optimal ϕ?**
- **What is the welfare role of bank capital requirements** in this model?
- Monetary policy: in NK models the optimal commitment is *zero* SS inflation ($\Pi = 1$)
  - eliminates *distortions from price rigidities* (price dispersion, adjustment costs)
- What is the analogous prescription regarding *financial distortions* and *optimal bank capital*?

Macroprudential policy: cyclical adjustment

- The authors assume macroprudential rule (CCB) of the form

$$\phi_t / \phi = (b_t / b)^{\zeta} .$$

- Why targeting the gap wrt to **steady state debt level** b**?**
- Should instead target the **constrained-efficient debt level** (" b_t^* ")
  - Unlikely to be constant
- Monetary policy analogy: target the gap wrt *efficient output* (y_t / y_t^*), i.e. the *welfare-relevant output gap*

Macroprudential policy: cyclical adjustment

- Same thing goes for LATW monetary policy rule,

$$R_t / R = \left(\Pi_t / \Pi\right)^{\tau_\Pi} \left(b_t / b\right)^{\tau_b} .$$

- Again, LATW should target **welfare-relevant debt gap**, b_t / b_t^*
- Monetary policy analogy: target zero inflation $(\Pi_t = 1, \forall t)$ so as to eliminate *price rigidity distortions*,

$$mc_t = \frac{\varepsilon - 1}{\varepsilon} + \mathbb{E}_t f\left(\Pi_t, \Pi_{t+1}\right) \underset{\Pi_t, \Pi_{t+1} \to 1}{\longrightarrow} \frac{\varepsilon - 1}{\varepsilon}$$

- What are the corresponding *financial wedges*, e.g. in the investment Euler equation?
- And what does that tell us about constrained-efficient debt b_t^*?

Implications for positive analysis

- Determinacy analysis is obviously affected by the assumed policy rules
- How would results change if rules targeted the *welfare-relevant debt gap* (b_t / b_t^*)?

$$R_t / R = (...)^{\tau_\Pi} \left(b_t / b_t^*\right)^{\tau_b} ,$$

$$\phi_t / \phi = \left(b_t / b_t^*\right)^{\zeta} .$$

- Would the Taylor principle still be violated for particular CCB (ζ) / LAWT (τ_b) calibrations?

Simplifying the normative analysis

- Aggregate resource constraint incorporates entrepreneurs' and bankers' consumption,

$$Y_t = C_t^E + C_t^B + \text{ monitoring costs } + \ ....$$

- But C_t^E and C_t^B do *not* affect social welfare (social 'waste')
- Yet they distort the allocations: C_t^E and C_t^B as additional 'wedges'
- Why not have E and B belong to a *large representative household* (e.g. as in Gertler & Karadi 2011)
  - Would allow for 'cleaner' welfare analysis

Conclusions

- Nice paper on a definitely important topic
- A bit more work on normative analysis would pay off