

Leaning Against the Credit Cycle

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THE PAPER IN BRIEF

Promising paper, neatly executed and full of insights.

Two empirical puzzles:

- ▶ persistence of the credit cycle;
- ▶ short term effect of monetary policy on real debt.

Two ingredients:

- ▶ gradual (and variable) amortization à la Kydland, Rupert, and Šustek (2012);
- ▶ collateral constraint à la Iacoviello (2005).

→ Amortization 'matters' because of collateral constraint

CONTRIBUTIONS

Two innovations:

- ▶ Households' net worth constrains new loans,

$$l_t \leq m_t \left[\frac{E_t [q_{t+1} \pi_{t+1}] h_{b,t}}{R_t} - b_{b,t} \right];$$

- ▶ Debt level in the interest rate rule,

$$R_t = \Pi_t^{\phi_\pi} \left(\frac{b_t}{b} \right)^{\phi_b}.$$

Two implications:

- ▶ “Vintage” composition of total debt matters *quantitatively*;
- ▶ Potential equilibrium indeterminacy.

THE COLLATERAL CONSTRAINT

$$l_t \leq m_t \left[\frac{E_t [q_{t+1} \pi_{t+1}] h_{b,t}}{R_t} - b_{b,t} \right]$$

Why only new loans and why net worth?

- ▶ Micro evidence of such a constraint (with 1q-debt it is easier)?
- ▶ What does a different constraint buy us?
- ▶ The calibrated differential in discount factors ($\beta_l - \beta_b \gg 0$) justifies an always binding constraint with 1q-loans (as in Iacoviello and Neri, 2010).
But how big must the differential be with multi-period loans?
→ Global solutions/nonlinear simulation of simplified versions?

THE DEBT LEVEL IN THE INTEREST RATE RULE

$$R_t = \Pi_t^{\phi_\pi} \left(\frac{b_t}{b} \right)^{\phi_b}$$

What causes the indeterminacy? The additional target or its specification?

- ▶ Why deviations from steady state and not growth rates à la Lambertini, Mendicino, Punzi (2013)?
- ▶ Why not a debt-to-GDP target?
- ▶ (Why not a separate macroprudential rule à la Brzoza-Brzezina, Gelain, Kolasa (2014)?)
- ▶ What is the threshold level of debt amortization speed that inverts the relation between ϕ_π and ϕ_b ? What happens with 2q-debt?

A CALIBRATION EXERCISE

- ▶ At the moment the parameters α and κ of the amortization process are calibrated to mimic a 30-year mortgage contract.
- ▶ Is it representative of the maturity and amortization structure of the overall economy?

An alternative might be to use the **volatility of debt as a target** and use α and κ to match it.