Discussion of "Welfare Implications of the Transition to High Household Debt"

Jeffrey R. Campbelland Zvi Hercowitz

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Question and Answers

- What are the aggregate, distributional and welfare effects of reducing at the same time downpayment on household capital (π) and the speed of repayment of collateralized household debt (ϕ)?
- Aggregate effects
  - The reform is expansionary: $\Delta N_B = 4\%$
  - Consumption of durables increases: $\Delta C_L = 12\%$ and $\Delta C_B = 2\%$
  - Consumption of non-durables is mixed: $\Delta C_L = 12\%$ and $\Delta C_B = -2\%$
- Distributional Effects
  - Income inequality increases
  - Wealth inequality increases: $W_L/W = 0.81$ in the initial steady-state and $W_L/W = 0.86$ after 25 years
- Welfare Effects
  - The reform is welfare improving: $\Delta U_L \equiv 2.02\%$ of C and $\Delta U_B \equiv 0.26\%$ of C.

The Model Economy

- Dynastic heterogeneous household closed model economy
- Households
  - There is one Lender, l, who stands-in for the wealthiest ten percent of the households and one Borrower, b, who stands-in for the rest
  - The Lender is patient and the Borrower is impatient ($\beta_b > \beta_l$)
  - The Lender owns the all the fixed stock of capital of the economy and she does not work
  - The Borrower receives an endowment of one unit of time every period and he supplies all the labor
- Firms: Standard Cobb-Douglas production function competitive firms

The Households' Decision Problems

- The Borrower's Problem

$$\sum_{t=0}^{\infty} \beta_b^t \left[\theta \log s_{bt} + (1-\theta) \log c_{bt} + \omega log(1 - n_{bt})\right] \tag{24}$$

subject to

$$c_{bt} + x_{bt} + r_{bt} b_t = w_t n_{bt} + b_{t+1}, \tag{25}$$

the usual capital accumulation equation, and the borrowing constraint.

- The Lender's Problem

$$\sum_{t=0}^{\infty} \beta_l^t \left[\theta \log s_{lt} + (1-\theta) \log c_{lt}\right] \tag{26}$$

subject to

$$c_{lt} + x_{lt} + \ell_{t+1} = r_{kt} k_l + r_{bt} \ell_t \tag{27}$$

and the usual capital accumulation equation.

Calibration

- Rates of time preference: $\rho_l = 4\%$ and $\rho_b = 6\%$
- Policy parameters: π and ϕ are calibrated sensibly
- Share parameters: standard and sensible

Policy Reform

- One time unexpected reduction in π and ϕ that expands the collateral value of the borrower's initial stock of durables, V_{b0}.

Comments (1)

- Modeling decisions
  - A story of ants and crickets: is it game?
  - Borrowing and lending positions change over the life-cycle
  - Sizable motives to save such as uninsurable risk and retirement are missing, do they matter?

- Calibration
  - In the U.S. economy the wealthiest ten percent earn 30% of total earnings. Shouldn't the labor decision be endogenous and model economy be calibrated so that the lender chooses to work?
  - In the U.S. economy the wealthiest ten percent own 69% of total wealth. In the initial steady state they own 81%. Does this affect your results?

Comments (and 2)

- Other Comments:
  - Analysis of the balance sheet absent. I would have loved to see it!
- Suggested readings
  - Díaz-Giménez, J. and L. Puch. "Borrowing constraints in economies with household capital and banking", *Investigaciones Económicas* XXII (3): 469–499 (1998).
  - Díaz-Giménez, J., E. C. Prescott, F. Alvárez and T. Fitzgerald. "Banking in computable general equilibrium economies", *Journal of Economic Dynamics and Control* 16: 533–559 (1992).
- Thanks for inviting me to discuss this paper. I enjoyed it a lot!