

Discussion

Multiple Equilibria in Open Economy Models with Collateral Constraints: Overborrowing Revisited

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 2. Quantitative analysis with flow constraints in stochastic calibrated model
 - ▶ Under-borrowing in constrained economy relative to First-Best unconstrained economy
 - ▶ Under-borrowing in constrained economy relative to Optimal Ramsey Planner (Capital controls)

Outline

1. Perspective
2. Brief description
 - 2.1 Model
 - 2.2 Results
3. Comments on theory
4. Comments on quantitative analysis

Some perspective

1. **Logic** underlying multiplicity

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3. **Welfare**: Constrained efficient solution for standard equilibrium selection features *overborrowing*

- ▶ This paper: opposite prescription

Canonical Models

1. Collateral constraint

$$\sum_{t=0}^{\infty} \beta^t u(c_t)$$

$$c_t + d_t + q_t(k_{t+1} - k_t) = A_t k_t^\alpha + \frac{d_{t+1}}{1+r}$$

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2. Normative results

- ▶ With perfect foresight, optimal policy implements the first-best equilibrium

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Figure 6: External Debt Densities With And Without Collateral Constraints

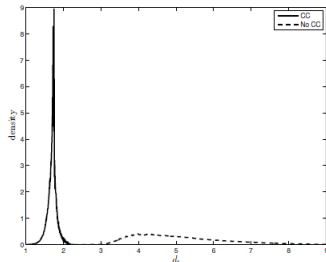
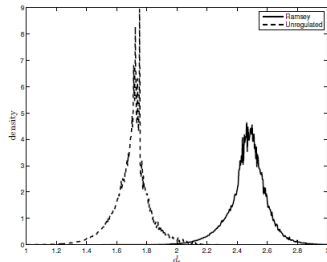


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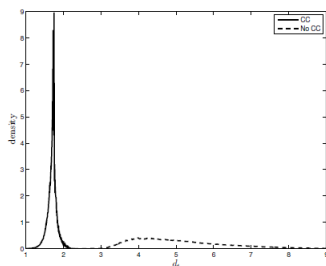
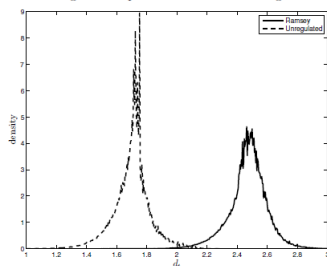


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▶ Results

- ▶ Debt in decentralized economy (CC) < Debt in unconstrained economy (intuitive)
- ▶ Debt in decentralized economy (CC) < Debt in Ramsey economy (under-borrowing)

Comments Theoretical Results

1. Conditions for multiplicity

- ▶ Provide more general parameter restrictions to guarantee uniqueness
 - ▶ Utility curvature parameter must be important (log utility in current version)
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- ▶ Solution of constrained planning problem becomes less trivial
- ▶ Two goals for constrained planner
 - ▶ Reduce over-borrowing in standard equilibrium
 - ▶ Reduce under-borrowing in undominated equilibrium

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 - ▶ Better connection between theory and quantification

Conclusion

- ▶ Multiplicity+Efficiency in this context
 - ▶ Important under-researched area
- ▶ Several very interesting results
- ▶ Lots of promise for the paper!