Fiscal Multipliers and Financial Crises

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Discussion

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Contribution of the Paper

Research Question

- What were the effects of fiscal policy on aggregate consumption during the Great Recession?
  - government purchases
  - transfers to households
  - equity injections and transfers to the financial sector
  - credit and asset guarantees

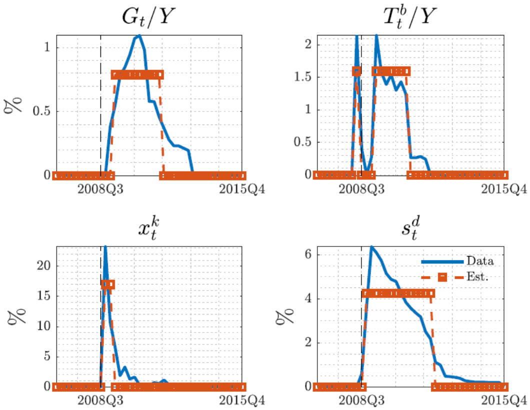
New Keynesian Model with Financial Sector

- Households:
  - Two types who differ in their preference for housing.
  - Savers invest in short-term bank deposits and government debt.
  - Borrowers own houses, have long-term debt and face a loan-to-value constraint.
  - A fraction m of the borrowers has to move, receives idiosyncratic housing quality shocks and may default.

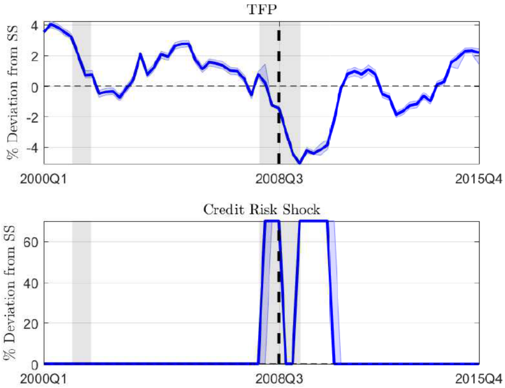
- Financial Sector:
  - Banks have short-terms deposits and long-term debt.
  - Banks face a leverage constraint: market value of assets has to be smaller than the ex-dividend market value of the bank.
  - Banks are hit by idiosyncratic shocks to their asset portfolio and may default on deposits.

Quantitative Analysis and Findings

- Feeding observed fiscal measures into the model:



- Given fiscal policies, estimation of TFP-shocks and credit shocks to match aggregate consumption and credit spreads:



- Findings:
  - Without fiscal interventions the fall in aggregate consumption would have been twice as worse.
  - Transfers and equity injections were most effective.
  - Fiscal multipliers are state-dependent.

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- Channel:
  - Transfers to borrowers sustain disposable income, increase house prices and reduce default rates $\rightarrow$ banks lend more at lower rates.
  - Bank recapitalization reduces costs of funds and increases lending $\rightarrow$ disposable income of households increases.

Comments

Distributional Effects and Welfare

- What are the distributional effects of the various fiscal interventions?
- In the counterfactual experiments, how are borrowers' consumption and savers' consumption affected?
- What are the welfare effects for savers and borrowers? What are the aggregate welfare effects?

Mapping Fiscal Policy Data to the Model

- Government Purchases G:
  - The ARRA contained substantial amounts of government investment: infrastructure, energy.
  - Distinction between government consumption and government investment may be important, see Drautzburg and Uhlig (2015).

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- Transfers T^b:
  - ESA, ARRA and TARP contained various measures including tax cuts, transfers and help for borrowers/homeowners.
  - Is it feasible to distinguish between the different measures?
  - E.g., programs for homeowners in need. In the model: fraction m of borrowers that are hit by the house quality shock.

The Role of Durable Spending

- Berger and Vavra (2015):
  - Durable adjustment is infrequent, particulary during recessions.
  - Substantial state-dependence: Recessions lead to a decline in the probability of durable adjustment of 20 % (of selling/buying a house of 15 %).
- The fiscal stimulus packages contained subsidies to durable adjustment, e.g., Cash for Clunkers.
- How important are these fiscal tools?
- Decomposition of aggregate consumption: non-durable and durable.

The Role of the Zero Lower Bound

- There is a large literature analyzing the size of the government spending multiplier at the ZLB.
- How effective are the various fiscal interventions at the ZLB?

The Role of Credit to the Corporate Sector

- In the model, there is no interaction between the financial sector and the corporate sector.
- Including credit to the corporate sector may be important when analyzing the impact of equity injections.

Other Comments

- Financial crises are exogenous events.
- To evaluate the fit of the model, it would be informative to plot the non-targeted variables as well, in particular nominal interest rate, household debt, house prices, household default rate.
- Critical parameters, e.g., fraction of borrowers (homeowners) $\chi = 0.45$.
- Maturity of government debt.

Conclusion

- Great paper on the effectiveness of various fiscal tools during the Great Recession.
- Contributions:
  - Incorporation of a financial sector and equilibrium default in a New Keynesian model.
  - Global solution method takes into account occasionally binding constraints and nonlinearities.
  - Very insightful quantitative assessment.