Fiscal Multipliers and Financial Crises
by Miguel Faria-e-Castro

Discussion
Almuth Scholl
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 → banks lend more at lower rates.
- Bank recapitalization reduces costs of funds and increases lending → 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, particularly 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.