

Discussion on  
“The Role of Automatic Stabilizers  
in the U.S. Business Cycle”

by McKay and Reis

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# Summary of the Paper 1/2

- Great paper: On two frontiers of macro:
  - ① Using an innovative model combining:
    - Market incompleteness (Krusell-Smith)
    - Nominal friction (Calvo)
  - ② Policies carefully modeled.
- Study the effects of various automatic fiscal stabilizers on (i) output volatility, and (ii) welfare.
  - Progressive income tax.
  - Proportional taxes (Corporate tax, property tax, consumption tax).
  - Transfers (UI, food stamps).
  - Government purchases.
- Closely related papers:
  - Gornemann, Kuester, and Nakajima (2012): Monetary policy.
  - Ravn and Sterk (2012): Job uncertainty.
  - Costain and Reiter (2004): Stabilization with labor market frictions.

## Summary of the Paper 2/2

Policies	$\sigma$ of $Y$	Level of $Y$	$\sigma$ of HH Cons	Welfare
Progressive tax	—	↓	⇓	⇑
Proportional tax	—	↓	—	↓
Transfers	↓	—	⇓	⇑
Procyclical $G$	↑	?	?	—
All of them	↑	↓	⇓	⇑

### ① “Automatic stabilizers” do not stabilize $Y$ at all!

- $\sigma_Y$  is slightly (2%) higher!
- Taxes do not affect aggregate volatility much.
- Transfers stabilize the economy moderately.
- Procyclical  $G$  destabilizes through the standard income effect.

### ② $Y$ is lower because of distortionary taxes.

### ③ Welfare improves because of better public insurance.

### ④ At the end, not much interaction across different elements.

## Comment 1/7: Cyclical of Fiscal Stabilizers

- Is the cyclical of the fiscal policy in data properly replicated in the model?
- Should compare the cyclical properties of various fiscal stabilizers in the model with their data counterpart.

## Comment 2/7: Decomposition

- Since the model is so rich, providing more details helps understanding what is going on.
  - Cyclicity of (pre-tax and after-tax) income, taxes paid, transfers received, consumption, hours for different groups (Capitalists, employed, unemployed, and the long-term unemployed).

## Comment 3/7: Extended UI Benefits

- Duration of unemployment insurance (UI) benefits are automatically extended in downturns, from 26 to up to 46 weeks.
- Moreover, special extensions are usually enacted in severe recessions (up to 99 weeks in the current slowdown).
- If those special extensions are expected, maybe they should be treated as an “automatic stabilizer”.
- Moreover, this is true for other fiscal measures that are regularly implemented and thus well expected.

## Comment 4/7: Why Weak Keynesian Channel?

“Keynesian channel” turned out to be weak.

$(Y \downarrow \Rightarrow Tax \downarrow \ \& \ Transfer \uparrow \Rightarrow C \uparrow \Rightarrow Demand \uparrow)$

- 1 General property of the NK model.
- 2 Not many households are borrowing-constrained (next comment).
- 3 Lower consumption is accompanied by higher investment. As a result, little effect on aggregate demand.
- 4 Ravn and Sterk (2012): Stronger “Keynesian channel,” possibly helped by the no-investment assumption.

## Comment 5/7: Wealth Distribution

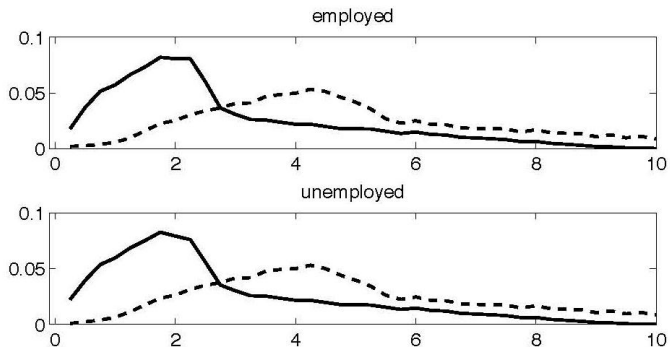
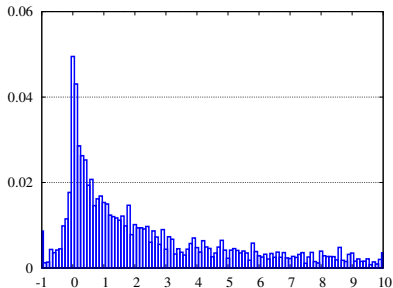


Figure: Wealth distribution: Model

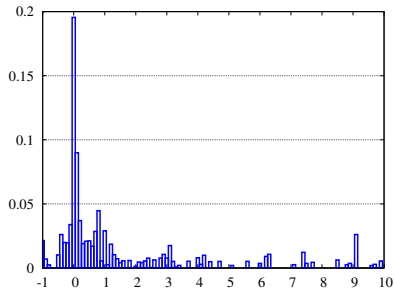
- In the model, few households are close to borrowing constrained.  
→ Small effects of transfers on aggregate consumption.
- Even fewer with precautionary savings against aggregate risks?  
(model is solved using local-linearization)



## Comment 5/7: Wealth Distribution



(a) Employed



(b) Unemployed

- In 2005 PSID, a large number of households hold zero or negative total wealth.
- 34% (12%) of unemployed (employed) have non-positive wealth.
- Hard to match in a model without life-cycle, permanent differences in productivity (education levels) or discount factor.
- Other frictions might force Households to behave like borrowing-constrained (Kaplan-Violante).

## Comment 6/7: Who Owns Firms?

- In the model, **Capitalists** own all the firms, while **Households** own only government bonds.
- This assumption helps computation.
  - Avoid the aggregation problem of households' discount factors.
  - The model is close to representative agent model (**Capitalists**).
  - **Households** do not affect the aggregate dynamics directly.
- However...
  - Is it reasonable? → Not so.
  - Does it matter? → Don't know.

## Comment 6/7: Who Owns Firms?

(SCF 2007)	All HHs	Top 20% (Capitalists)	Bottom 80% (Households)
% holding stock	17.6	42.5	11.4
Stocks/Wealth	5.9	6.7	1.6
% holding equity	52.8	88.3	43.9
Equity/Wealth	20.8	22.0	14.7
% holding business	13.4	35.7	7.9
Business/Wealth	25.0	28.7	5.0
% holding housing	67.5	97.8	60.0
Housing/Wealth	49.5	35.9	121.9

- 1 Direct holding of capital is limited (only 43% of Capitalists).
- 2 44% of Households hold stocks either directly or indirectly.
- 3 Equity and business make up 22% and 29% of Capitalists' wealth.
- 4 For both Capitalists and Households, housing is large.

## Comment 7/7: A Missing Channel

- Extensive margin of labor supply adjustment accounts for a large part of output fluctuations.
- Why automatic stabilizers are needed? → Unemployment?
- Standard theory: search and matching model.
- Costain and Reiter (2004)
  - Incomplete-market RBC model with labor market frictions.
  - Procyclical tax on output reduces fluctuations of total surplus, and thus vacancies, (un)employment, and output.

## Concluding Remarks

- The paper addresses an important question using a state-of-the-art quantitative macro model.
- Overall results seem negative, but a lot of things going on.
  - Providing more disaggregated statistics helps.
- Make sure that the model is given a fair chance.
  - Check cyclicity of fiscal stabilizers.
  - *Reasonable* number of borrowing-constrained Households.
- At the end, aggregate income fluctuations is small compared with individual income fluctuations. Why do we care?
- Don't we care about fiscal stabilizers (aggregate fluctuations) because of unemployment?