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

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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:

- Costain and Reiter (2004): Stabilization with labor market frictions.
### Summary of the Paper 2/2

<table>
<thead>
<tr>
<th>Policies</th>
<th>$\sigma$ of $Y$</th>
<th>Level of $Y$</th>
<th>$\sigma$ of HH Cons</th>
<th>Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive tax</td>
<td>$-$</td>
<td>$\downarrow$</td>
<td>$\downarrow \downarrow$</td>
<td>$\uparrow \uparrow$</td>
</tr>
<tr>
<td>Proportional tax</td>
<td>$-$</td>
<td>$\downarrow$</td>
<td>$-$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td>Transfers</td>
<td>$\downarrow$</td>
<td>$-$</td>
<td>$\downarrow \downarrow$</td>
<td>$\uparrow \uparrow$</td>
</tr>
<tr>
<td>Procyclical $G$</td>
<td>$\uparrow$</td>
<td>$?$</td>
<td>$?$</td>
<td>$-$</td>
</tr>
<tr>
<td>All of them</td>
<td>$\uparrow$</td>
<td>$\downarrow$</td>
<td>$\downarrow \downarrow$</td>
<td>$\uparrow \uparrow$</td>
</tr>
</tbody>
</table>

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: Cyclicality of Fiscal Stabilizers

- Is the cyclicality 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.
  - Cyclicality of (pre-tax and after-tax) income, taxes paid, transfers received, consumption, hours for different groups (Capitalists, employed, unemployed, and the long-term unemployed).
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.

Comment 5/7: Wealth Distribution

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)
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?

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

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.
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 cyclicality 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?