

# Discussion of Mendicino et al.: Extreme Financial Distress and the Macroeconomy

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# Motivation

## DSGE models under siege

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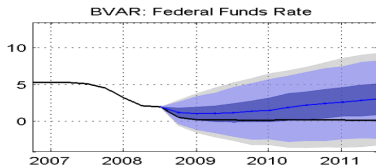
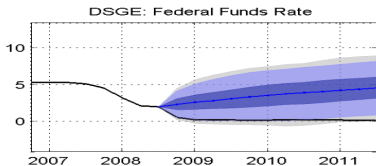
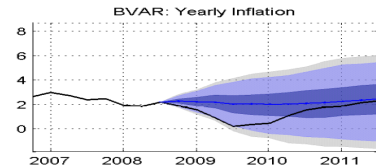
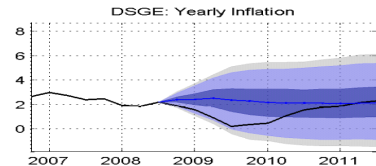
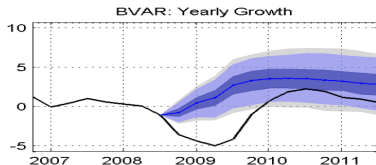
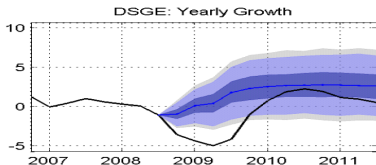
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- In a 2016 paper, this year's Nobel laureate Romer launched a full attack on DSGE models:
  - *"For more than three decades, macroeconomics has gone backwards. . . models attribute fluctuations in aggregate variables to imaginary causal forces that are not influenced by the action that any person takes".*

# Motivation II

LSW (2016): coverage problem of standard linearized models without financial frictions



# Mission of paper

Develop a model with financial frictions and extreme distress

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- Bottom line message: FF key for understanding macroeconomic fluctuations: both as propagation and impulses.
- **A very nice and rich paper on an important topic.**

- Comments on model
- Empirical properties of model
- Wishlist for future extensions
- Wrap up

# Comments on model

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- So more ambitious targets for deposit insurances to avoid bank-runs require notably higher bank capital requirements to damp moral hazard behavior of the banks.
- **Would this feature survive if you assumed bank-runs were feasible?**

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- Figures 12-14 suggest that the influence of financial factors are quite sensitive to the assumed requirement; higher capital requirements makes the economy much more resilient to financial developments and are also welfare enhancing.
  - Would be interesting to explore the sensitivity of the welfare result of optimal high capital requirement to the deposit insurance schedule.

# Comments on model III

Tease out partial derivative w.r.t. BGG (1999)

- I think Figures 2-5 are great to build intuition about the model.
- Still, I would really like you to include one variant with the BGG (1999) mechanism only.
- Doing so would allow you to examine how much propagation the Bank Risk-taking Channel adds relative to BGG.

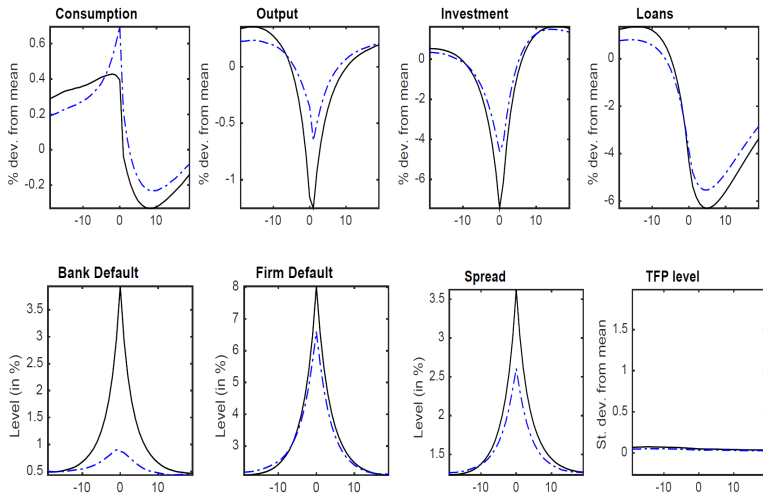
# Empirical properties of model

## Persistence and size of the recessions

- In Figure 8, you show the average paths for exogenous and endogenous variables conditional on 90th percentiles for firm and bank defaults.
- Consumption, output and investment falls. Investment sharply.
- The figure shows that economic downturns associated with both high levels of bank and firms default rates are more severe, and that the non-diversifiable island risk shocks are key. Firm idiosyncratic shocks are important too, but technology shocks appear basically irrelevant.

# Empirical properties of model

Persistence and size of the recessions: Figure 8 in paper





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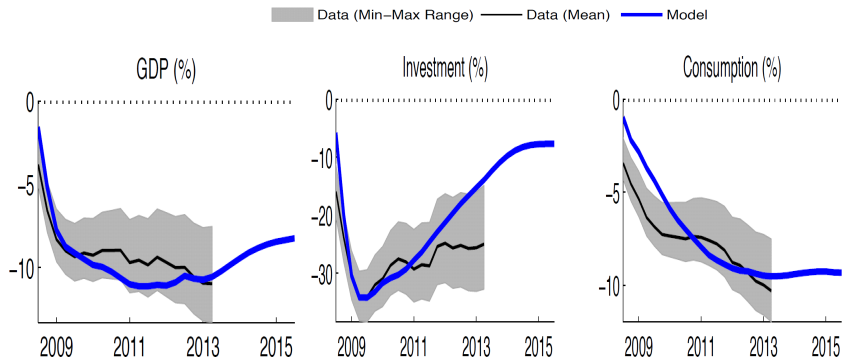
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  - ② *Persistence problem*: Mean reversion in the model is very quick. In the data, financial crises are characterized by slow recoveries.
- Persistence problem might be addressed by adding autocorrelation moments to your SMM estimations.

# Empirical properties of model

Persistence and size of the recessions Cont. CET evidence from the GR.

Figure 8: The U.S. Great Recession: Data vs. Model



# Empirical properties of model

## Selection of percentiles...

- You stress asymmetries related to the 3rd order approximation of your model.
- Judging from model distributions relative to a normal, you indeed have some interesting asymmetries in the model at the 10th and 90th percentiles.

	Empirical--Uncond.	Model--Cond.	Model-Normal Dist
Mean	0,3668	0,3313	0,3313
SD	0,5953	0,9493	0,9493
10th	-0,3015	-1,1032	-0,88528
90th	0,9161	1,2305	1,547877

- But given title of paper and the GR/EA crisis you should include lower percentiles so that we learn how the model works under extreme distress. Shortage of EA data: move to US data.

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  - Require re-estimation (and think about mechanisms to generate booms and persistent busts).

# Wishlist with future extensions

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  - ② **Housing and borrow constrained households as an amplification factor (and normative implications for mp).**

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- Look forward to see the next draft and future follow-up papers!