Discussion of

Fiscal Multipliers and Financial Crises

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The Paper in a Nutshell

- What did U.S. fiscal policy do to aggregate consumption during the Great Recession?

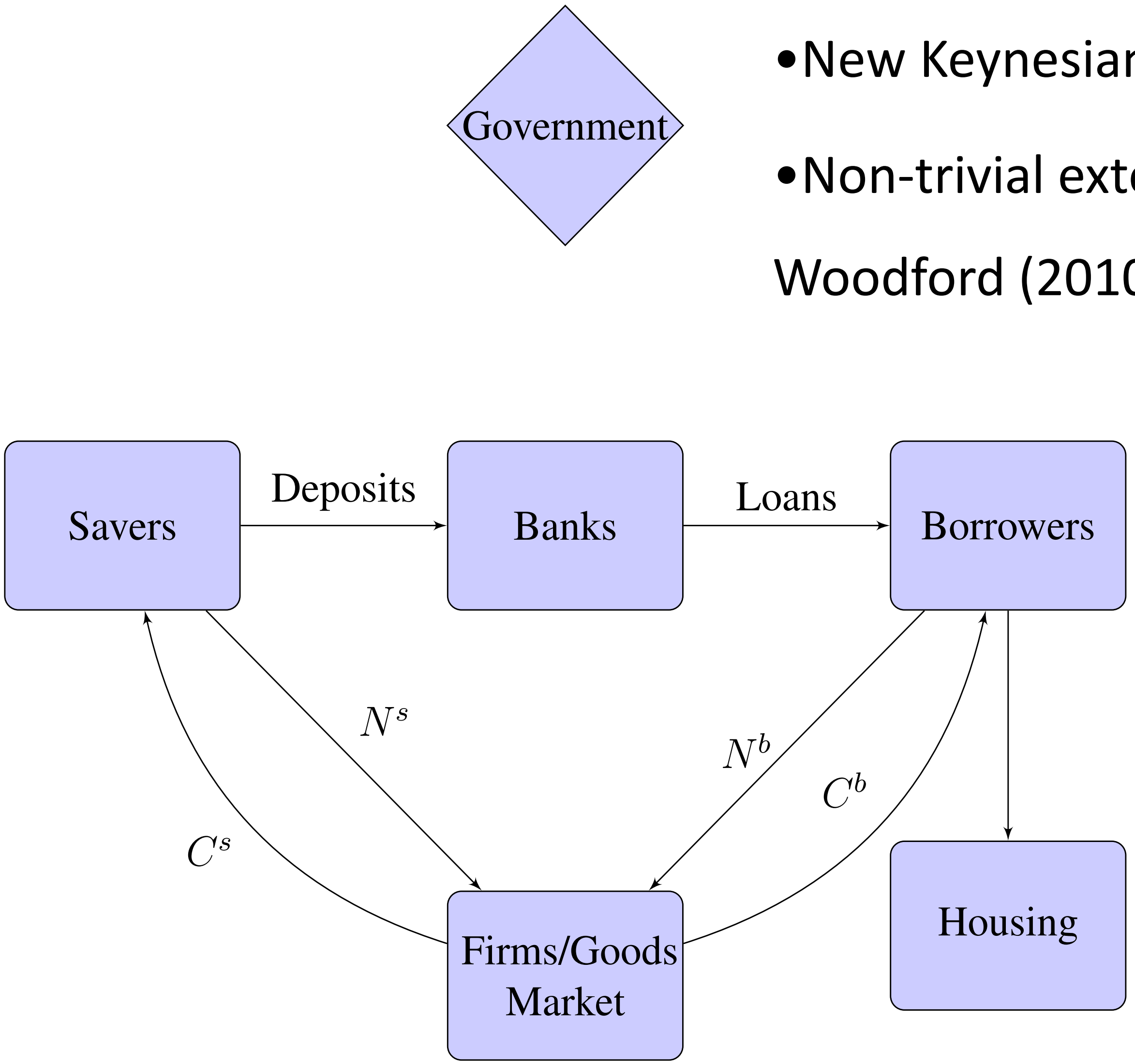
- Model-based analysis using New Keynesian model with banks, housing and fiscal policy.

- Measurement of fiscal stimulus during Great Recession:
  - Gov. consumption, transfers to households, bank recapitalization and credit guarantees.

The Paper in a Nutshell

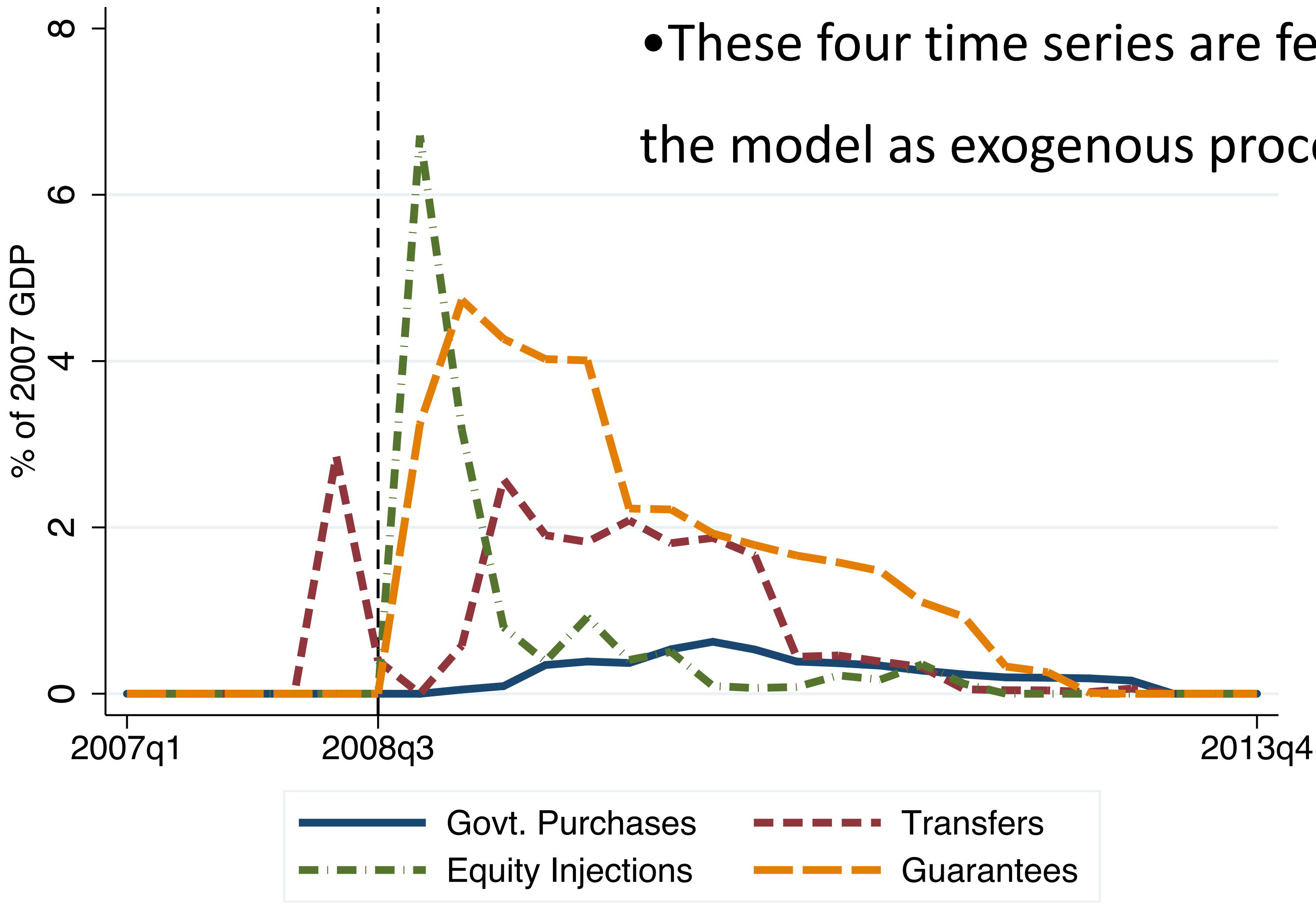
- Key result I: Consumption would have fallen by 50% more during the Great Recession without fiscal stimulus.
  - Consumption would have fallen by about 3.75% instead of 2.5%.
- Key result II: Transfers to households (borrowers) and bank recapitalization particularly effective during the Great Recession.
- Key result III: Fiscal multipliers state dependent.

The Model



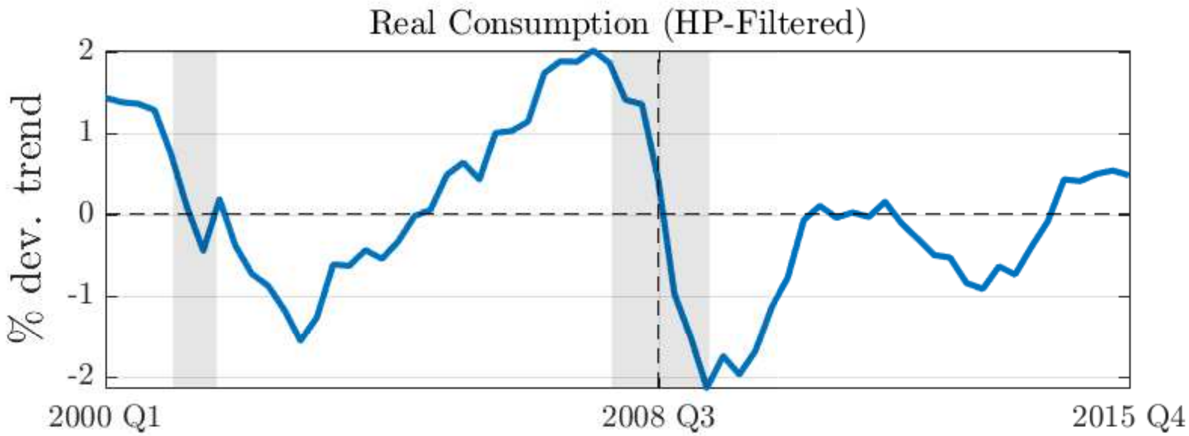
- New Keynesian Model (nonlinear)
- Non-trivial extension of Curdia-Woodford (2010)

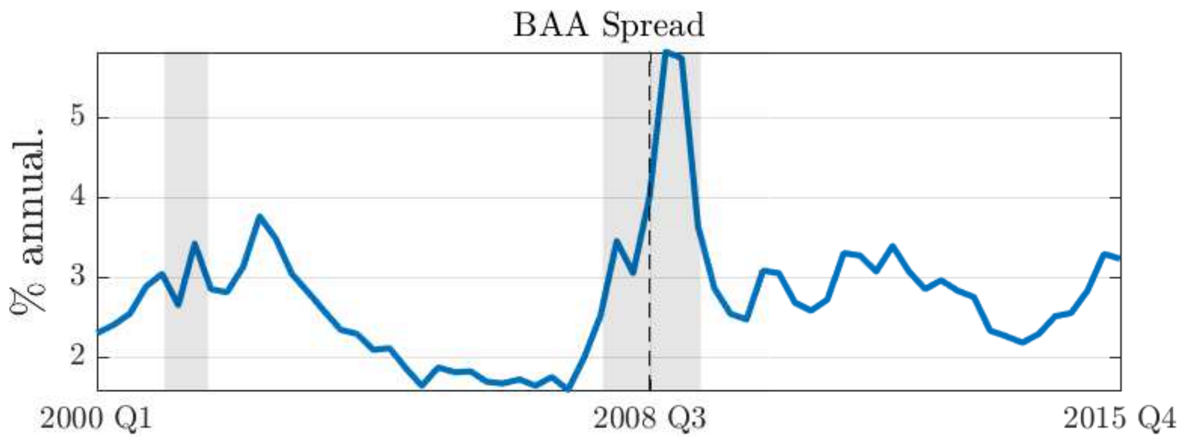
Fiscal Interventions



- These four time series are fed into the model as exogenous processes.

Further Observables

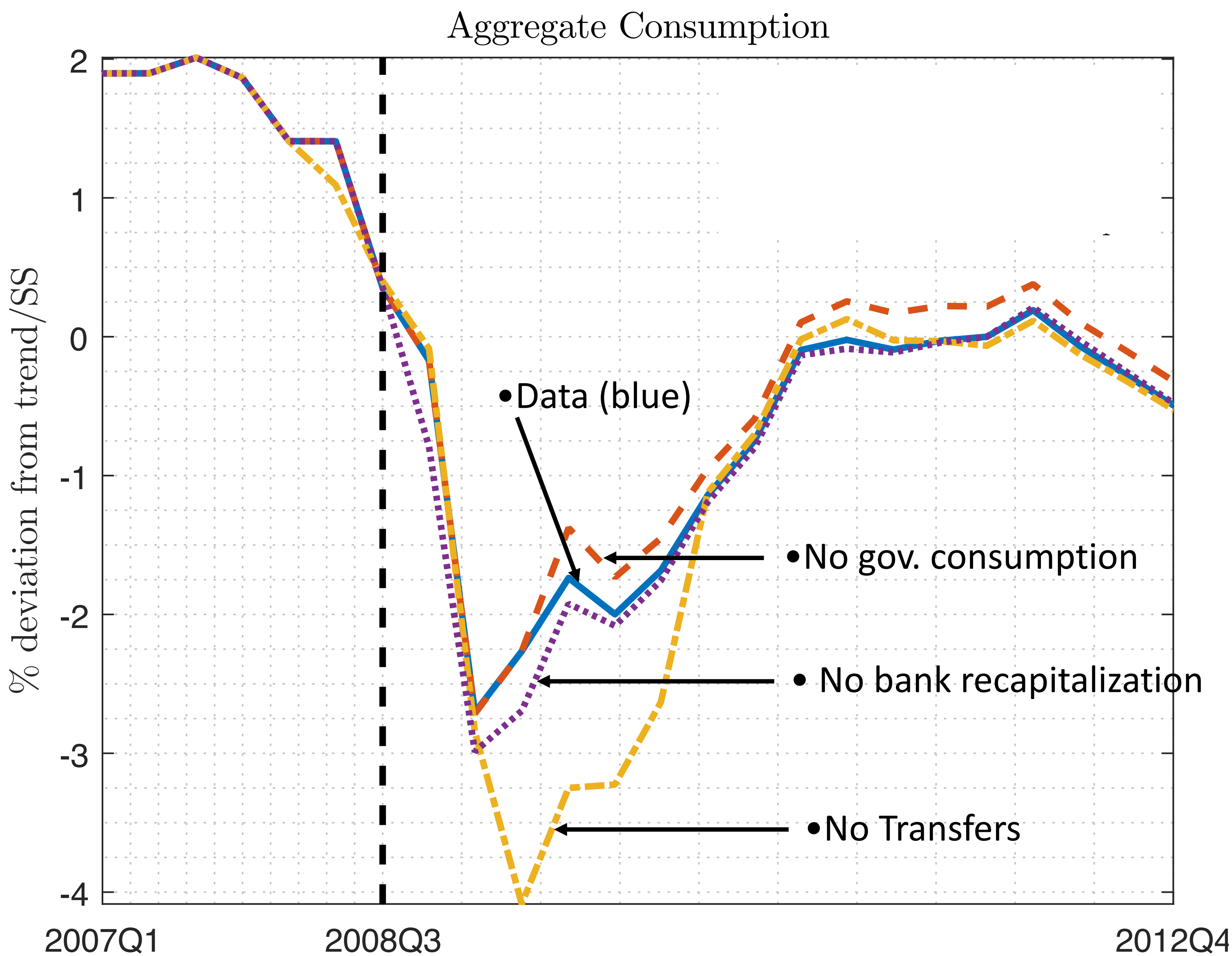




- These two time series are also fed into the model

- Particle filter used to extract shocks to exogenous TFP and exogenous credit risk.

Key Results: Effects of Fiscal Policy

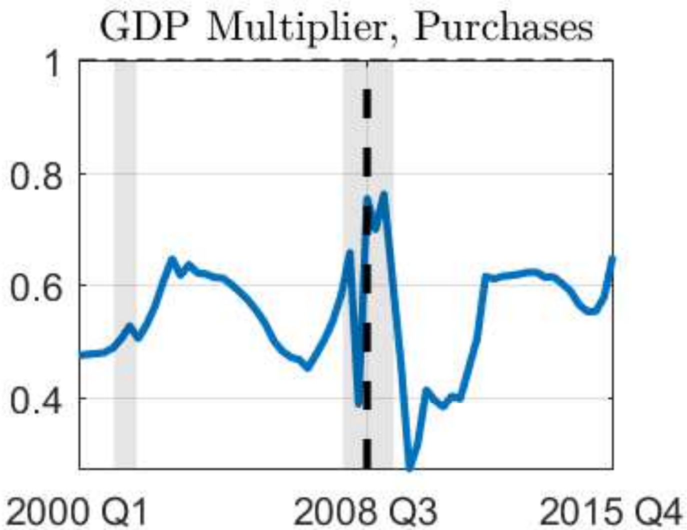


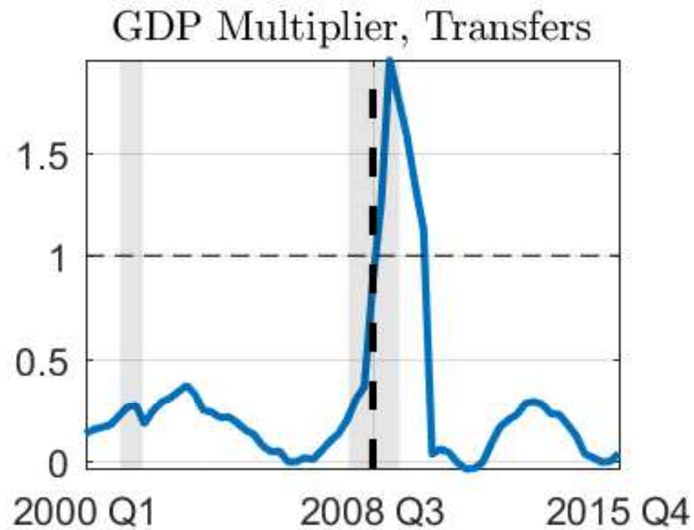
Intuition

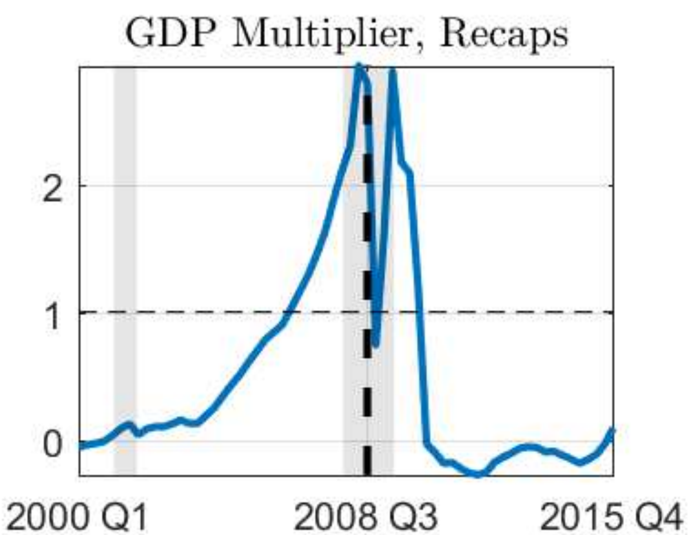
- Why are transfers to borrowers and bank recapitalizations most efficacious during the crisis?
  – Transfers directly relax borrowing constraint and bank recap. directly reduce credit spread.

- Minor questions:
  – Why are bank guarantees not plotted in figure?
  – Why is trough of consumption different in figures 3 and 8?
  – How important are TFP and credit risk shocks for consumption and BAA spread (historical decomp.)?

Key Result: State Dependent Multipliers





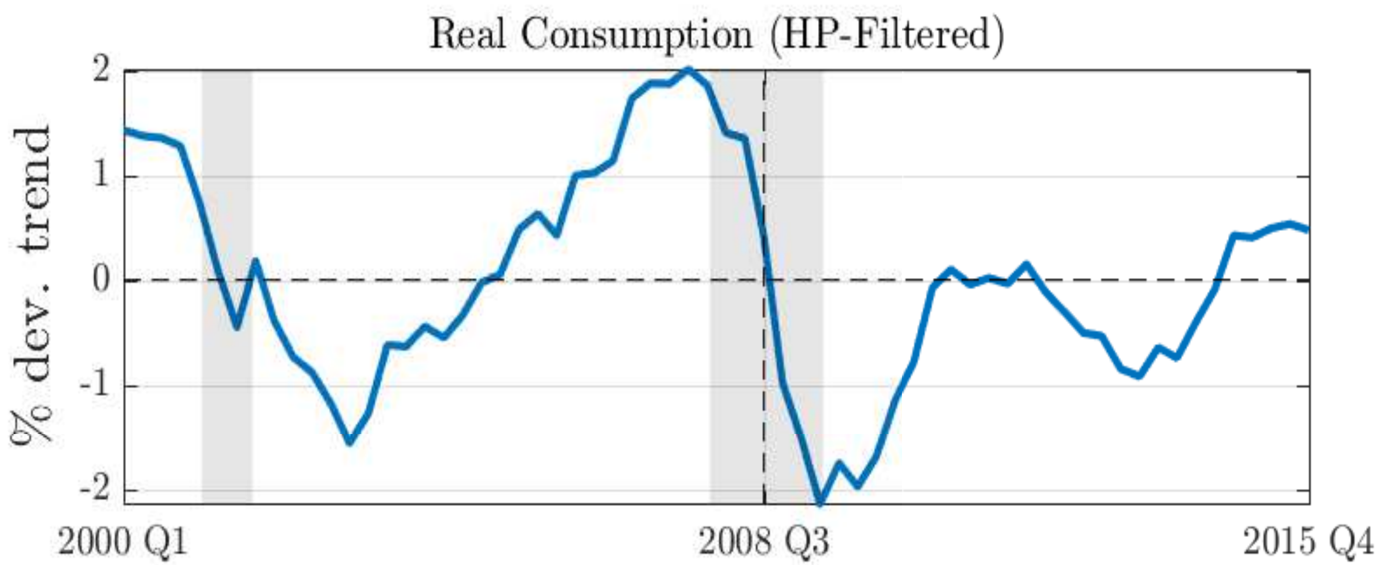


- Notice that multipliers for transfers and recaps are basically zero in normal times but high during crisis times.

- Purchases multiplier always below one.

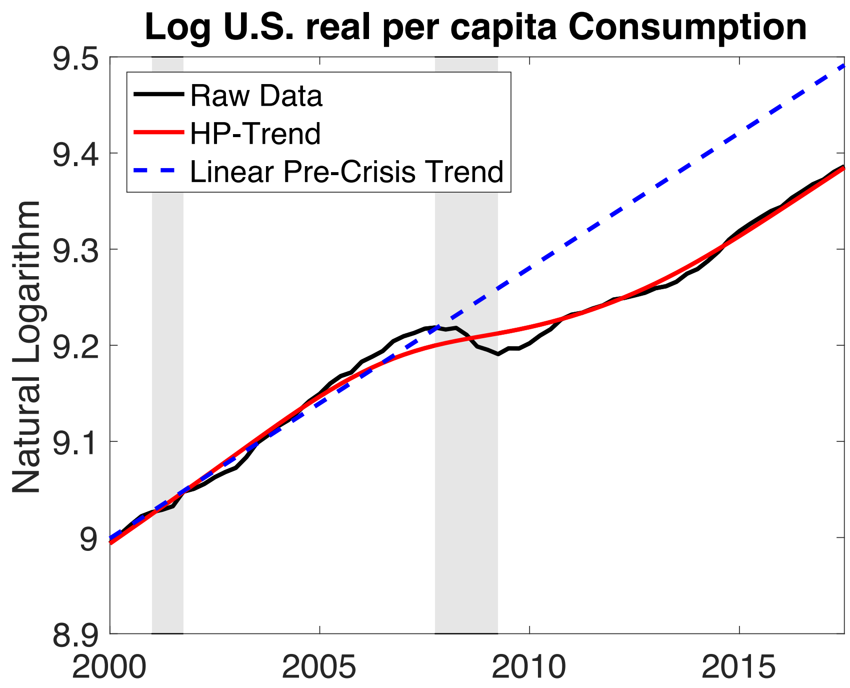
Depth and Duration of the Great Recession

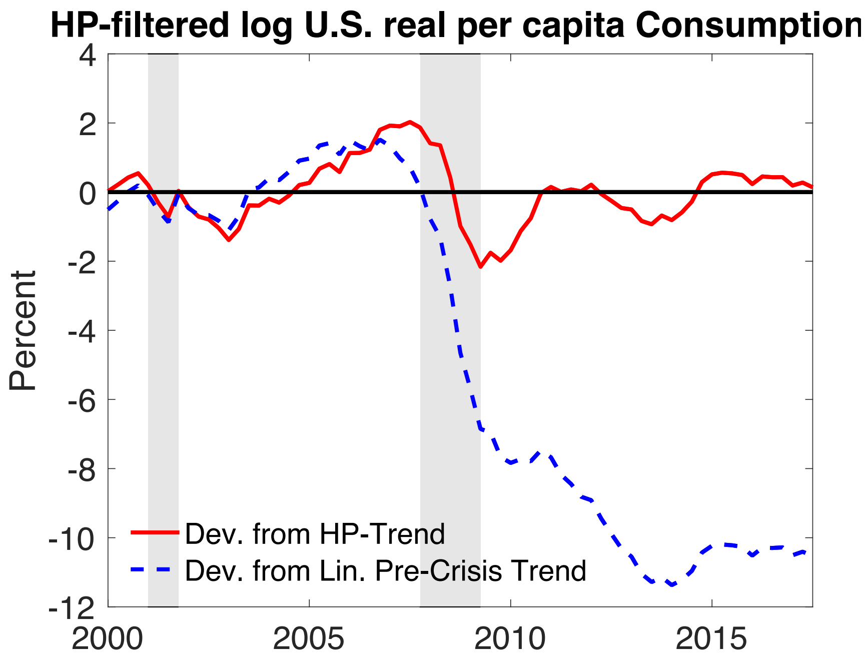
- Paper implies that the economy was back to ‘normal’ by end-2010. Also, the recession was quite shallow.



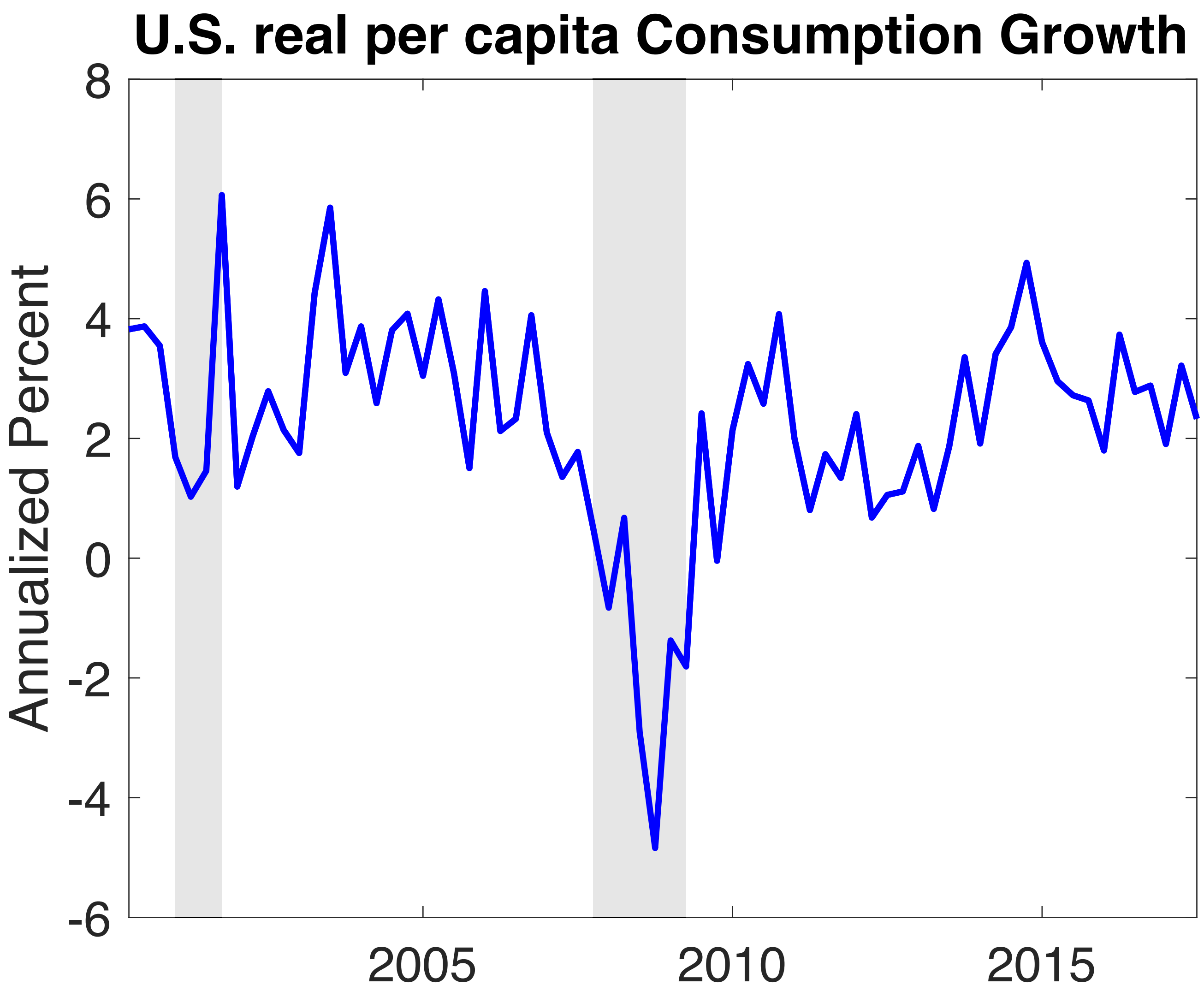
- Use of HP-filtered data appears problematic – fiscal multipliers depend on depth and duration of crisis!

HP vs. Linear Pre-Crisis Trend





- HP trend generates a very short-lived and shallow recession
- Linear pre-crisis trend perhaps also extreme
- Suggestion: use consumption growth rate as observable


U.S. real per capita Consumption Growth
Annualized Percent
8
6
4
2
0
-2
-4
-6
2005
2010
2015

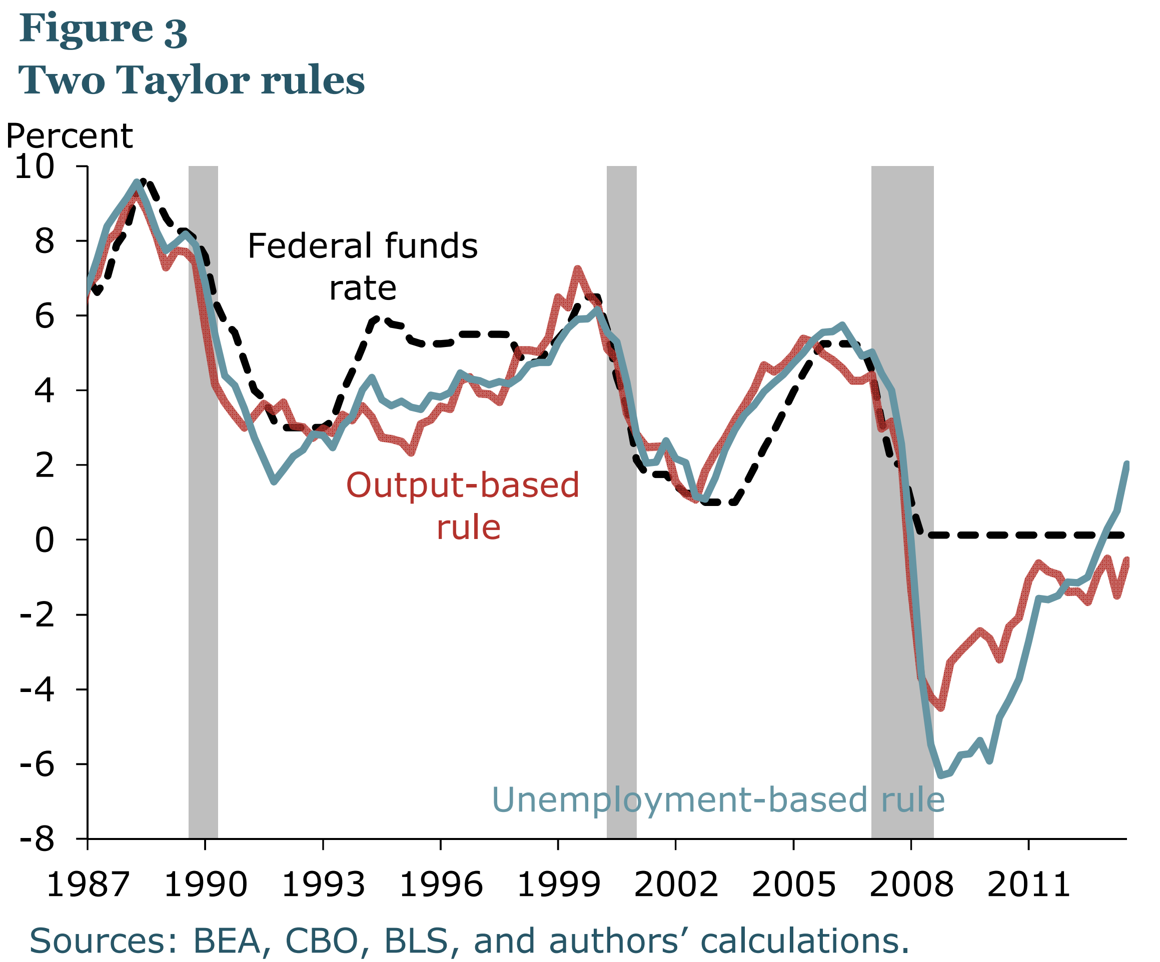
The Zero Lower Bound

- Taylor rule used in model:

$$Q_t^{-1} = \bar{Q}^{-1} \left[\frac{\Pi_t}{\bar{\bar{\Pi}}} \right]^{\phi_\Pi} \left[\frac{Y_t}{\bar{\bar{Y}}} \right]^{\phi_Y}$$

- Model solution and analysis abstracts from the zero lower bound on the nominal policy interest rate.

Taylor Rules vs. Federal Funds Rate



•Source: Elias, Irvin and Jorda, 2014, FRBSF Economic Letter, 2014-35

Comments on ZLB

- Unfortunately, paper does not show any nominal variables (inflation, nominal interest rate, …).
  - How large are the discrepancies for inflation and the nominal interest rate in the model and the data?

- Crowding out of consumption due to higher gov. purchases suggests standard interest rate response (i.e. ZLB not binding).

Comments on ZLB

- There exists a very large literature emphasizing the importance of the ZLB for the magnitude of fiscal multipliers.
  - How do the multiplier estimates for the various fiscal instruments considered in this paper depend on the ZLB?
  - How do the ZLB multipliers compare with the literature?

Further (Minor) Comments

- Parameterization implies a very steep Phillips curve which is at odds with recent data.
- How important are resource costs of price adjustment quantitatively?
- Taylor rule in terms of GDP rather than gross output?
- Model extension with endogenous capital would be very interesting.

Conclusion

- Very interesting and inspiring paper!

- Lots of food for thought.