Financial Frictions, Asset Prices, and the Great Recession

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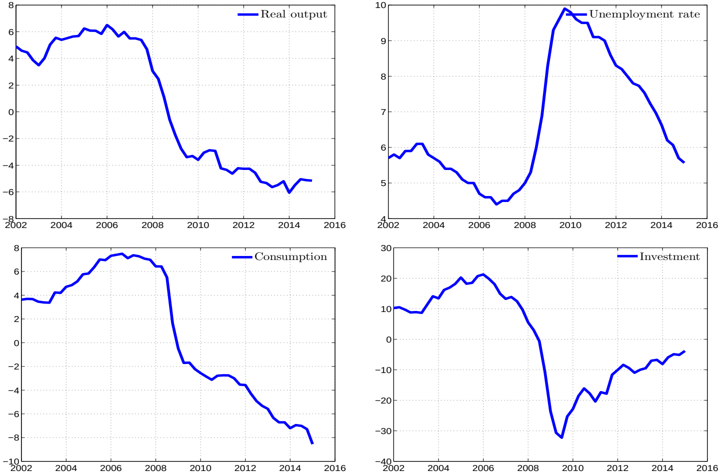
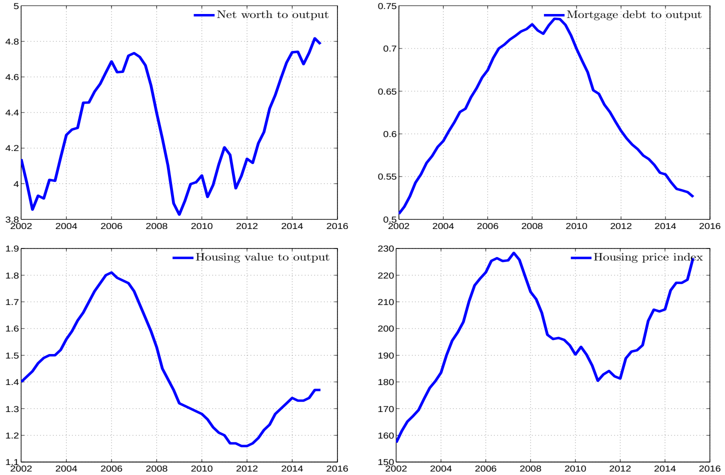
Facts on the last recession: Output, Unemp, Cons, Inv

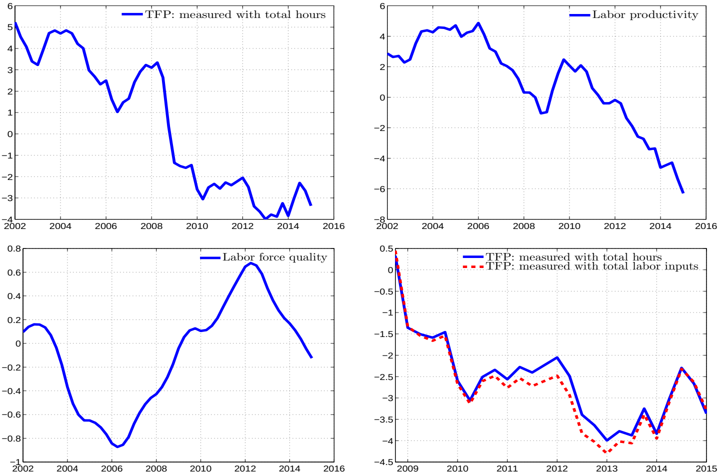


Note: Except for unemployment, figures show percentage deviation from a linear trend.

Facts on the Great Recession: wealth, mortg, houses, pr h



Facts on the last recession: productivity and labor quality



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- Financing difficulties contribute to cut spending both of firms and households.
- Most of the action occurs via a demand reduction.
- Yet models have a hard time to deliver this.

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  - Production with Savings
  - A lot of wealth
  - Heterogeneity so that financial frictions restrict trade between households

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5. Some labor market frictions that limit wage adjustments.

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  - Rich all else.

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- We have to take care of wages dynamics. They are determined via the following formula

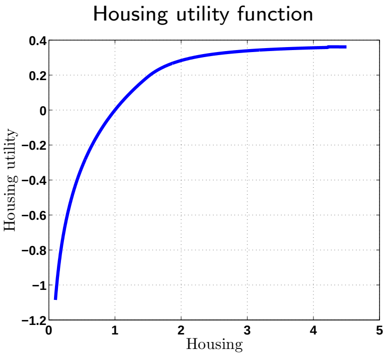
$$\log w - \log \overline{w} = \varepsilon_w \left(\log Y - \log \overline{Y} \right)$$

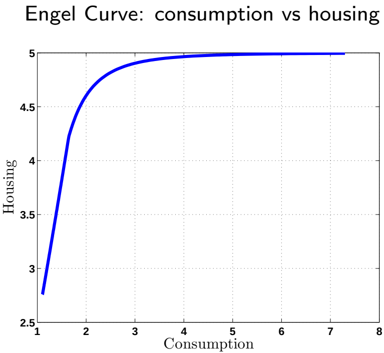
[Gornemann, Kuester, and Nakajima(2012)].

- Solving the transition implies solving for sequences for home prices, wages, nontradable prices.
- We assume the transition is completed in T periods.

Mapping the Model to Data

Housing Utility Function





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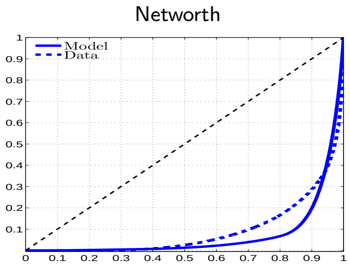
  - Changes (inv, TFP, exports) during the transition

Lorenz Curve ◂ Return



Experiments: once and for all set of surprises

- Over three months the down payment changes from 20% to 40%
- The borrowing interest rate's surcharge goes from zero to 0.5%

Long Run Properties

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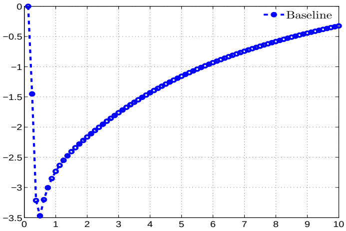
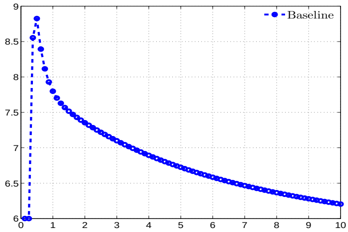
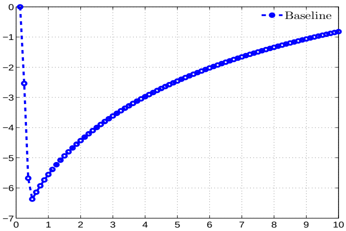
- But in our economies the transition is associated to a recession.



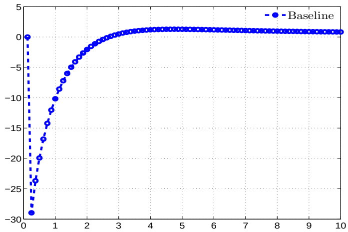
Real output



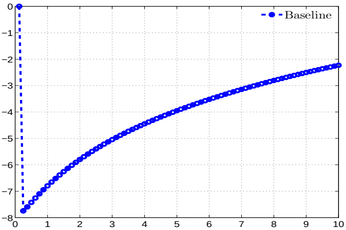
Unemployment



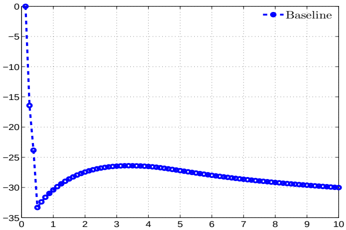
Consumption



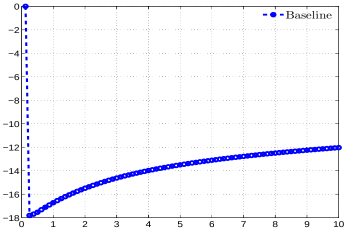
Investment



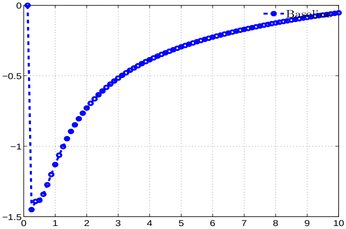
Wealth



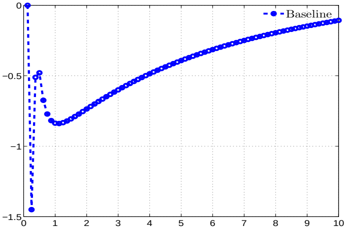
Debt



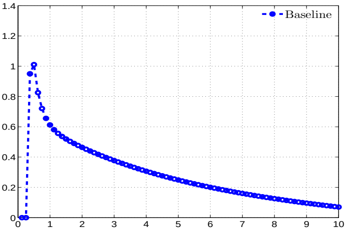
Housing price



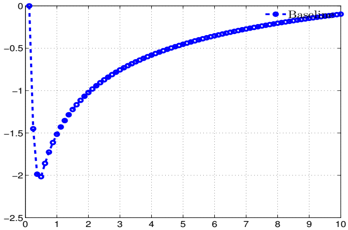
TFP with total hours



Labor Productivity

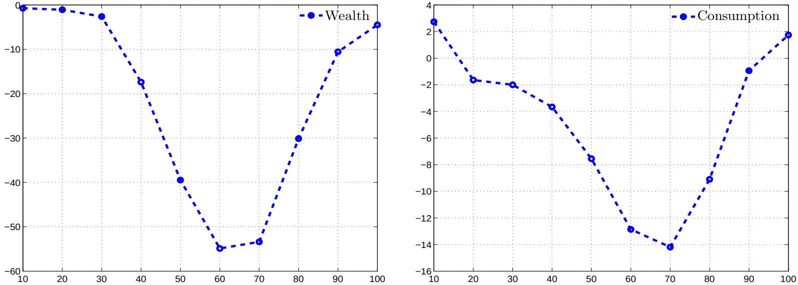


Labor quality



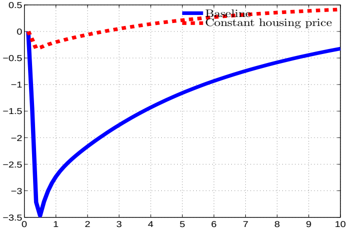
TFP with total labor inputs

Cross-Sectional Effects



- This agrees with the evidence in [Petev, Pistaferri, and Eksten(2012)] and [Parker and Vissing-Jorgensen(2009)]

Constant Housing Prices: Loss of Wealth is what matters



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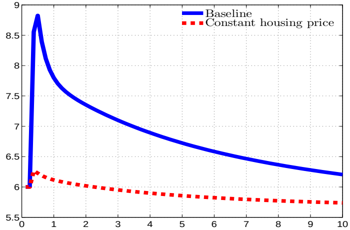
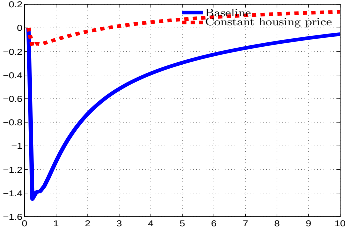
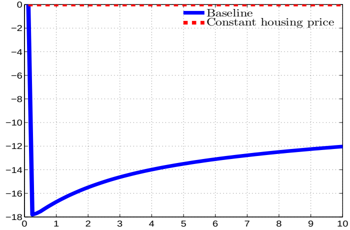


Unemployment rate



TFP



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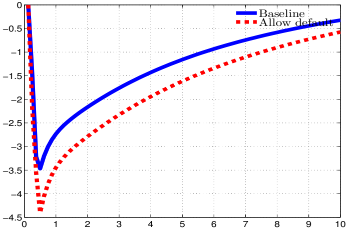
Allowing Default Exacerbates the Recession



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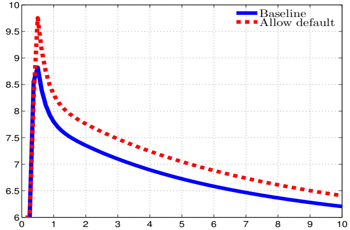

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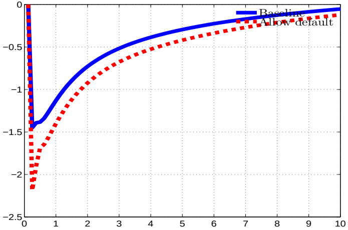

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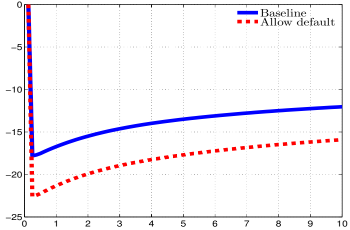

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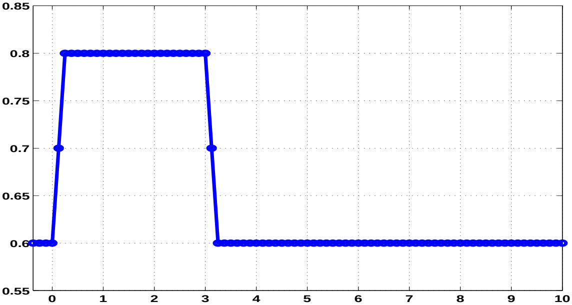
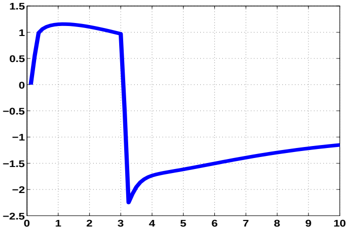
Financial Expansion looks good for the Aughts: Credit Cycle



Loan to value ratio λ

Experiment 7: Credit Cycle



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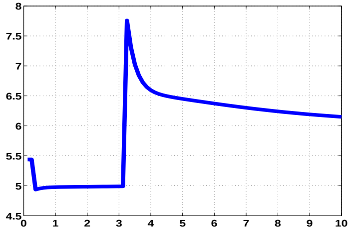

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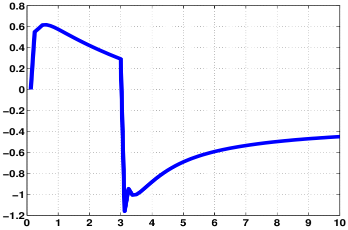
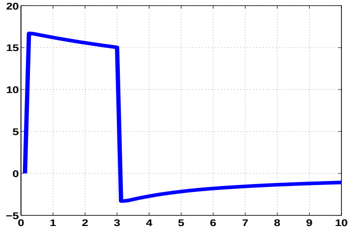


TFP



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  - Model of banking cycles.

References

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Thank you very much