

Longer-Term Consequences on Income Distribution of the Great Recession

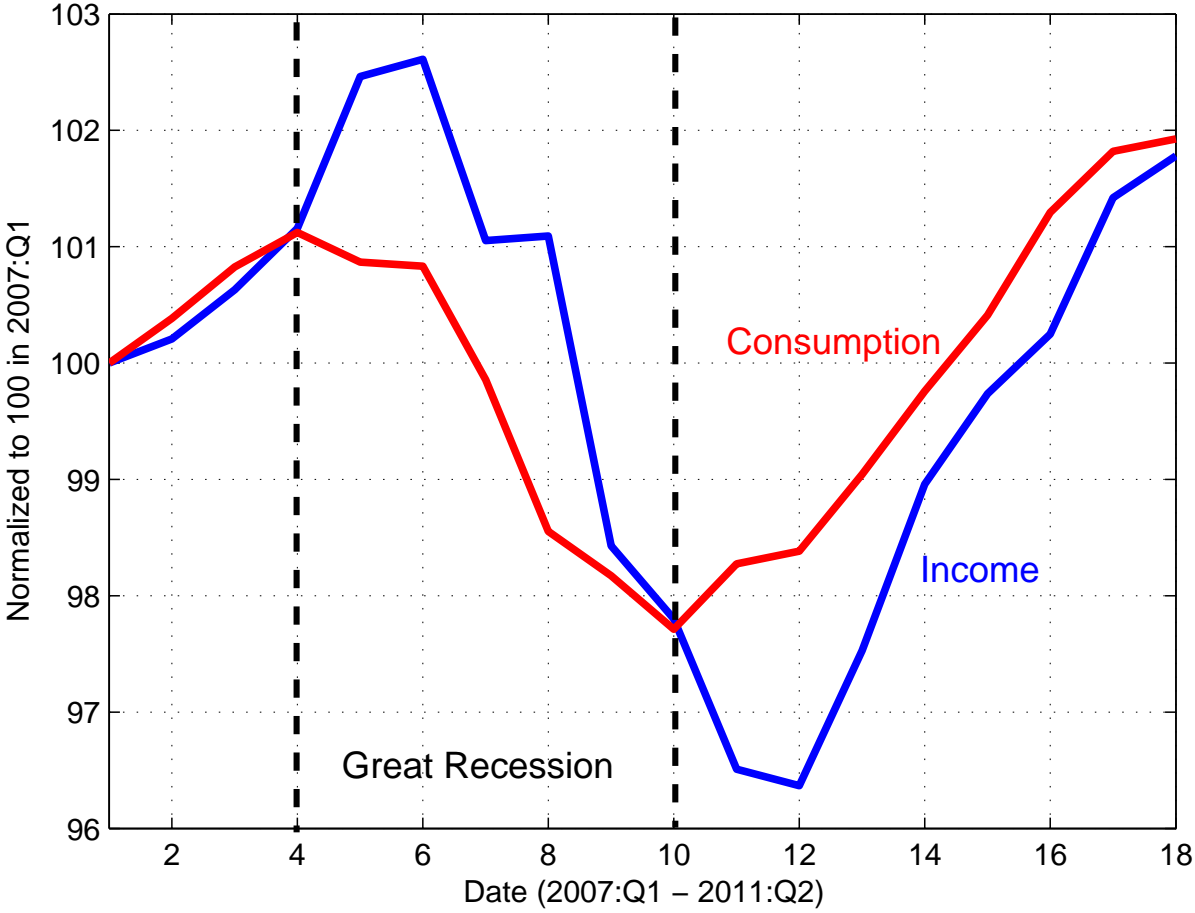
*Agar Brugiavini and Guglielmo Weber
with*

Orazio Attanasio, Margherita Borella, Olympia Bover, Torben Heien Nielsen

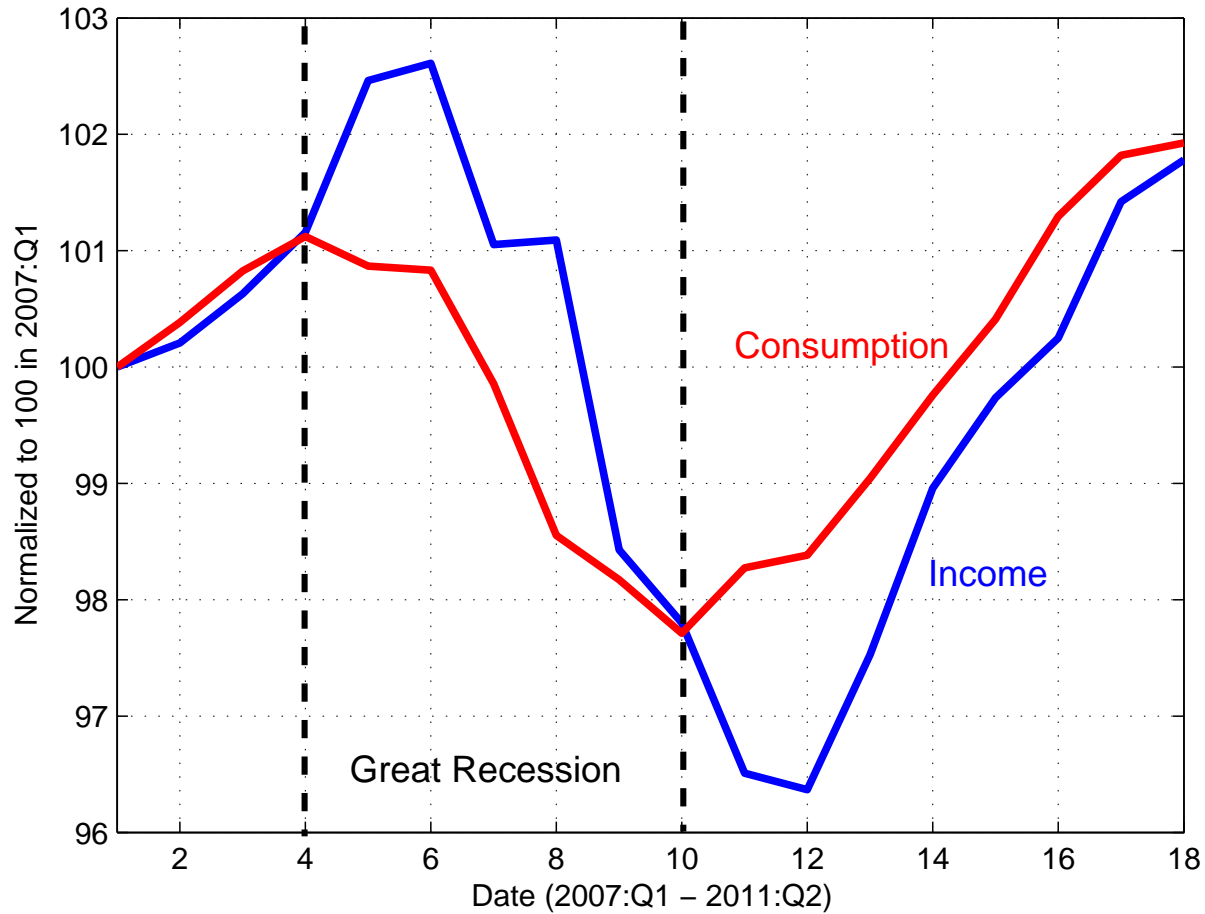
Discussion by Gianluca Violante (NYU)

[“Incomes Across the Great Recession”, Palermo, September 10th, 2011](#)

What the macro time series tell us (for the US)



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Aggregates hide a lot of heterogeneity

Questions and answers

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Answers

1. Diverse findings across different countries
2. Very high pass-through from shocks to disposable income into consumption (larger than for the US, where $\phi = 0.64$)
 - ▶ In some cases, pass-through coefficient $\phi > 1$

1. Focus on disposable income is somewhat restrictive

From individual wages to household consumption

$$c = \sum_{i=1}^N w_i h_i + b^P + b^G - \tau + a - a' + d$$

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- w_i individual wage
- $w_i h_i$ individual labor supply
- $\sum_{i=1}^N w_i h_i$ household labor supply
- $\sum_{i=1}^N w_i h_i + b^P$ family/social networks
- $\sum_{i=1}^N w_i h_i + b^P + b^G - \tau$ public transfers and tax system
- $c = \dots + a - a' + d$ borrowing/saving and financial markets

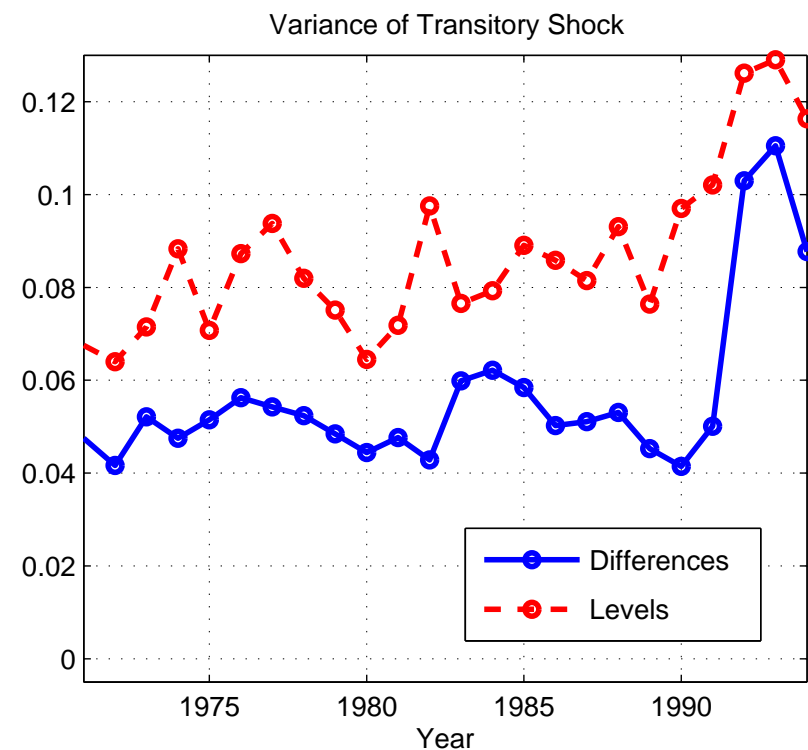
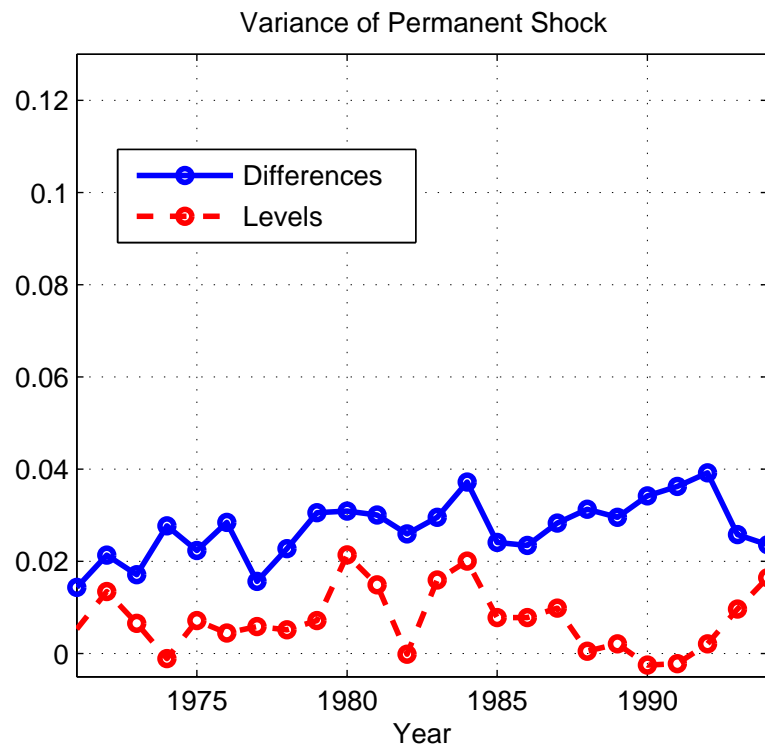
2. Permanent-transitory model might be misspecified

Moments used in the estimation matter

Minimum distance estimation can be equally performed on income covariances in levels or in first-differences

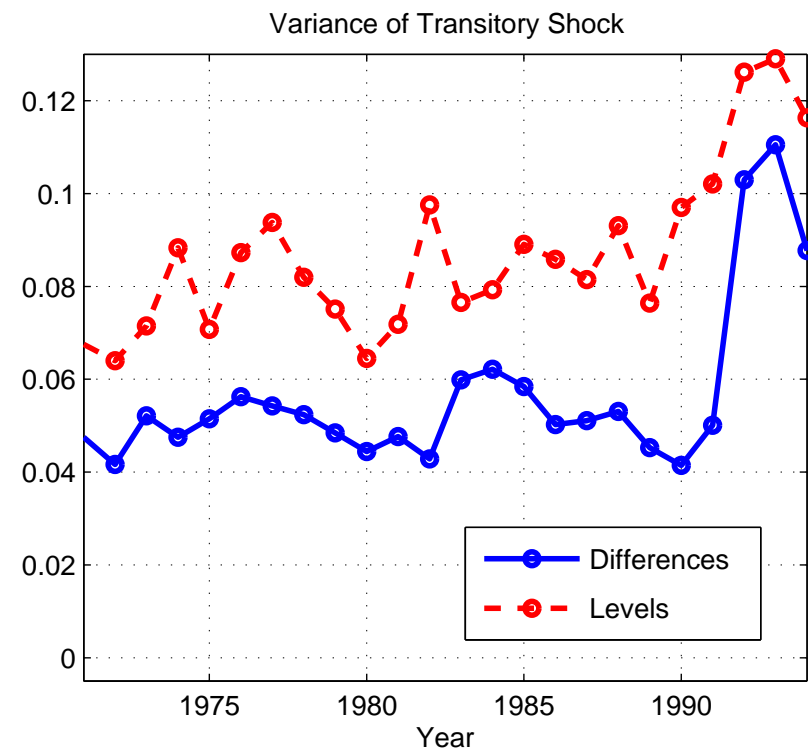
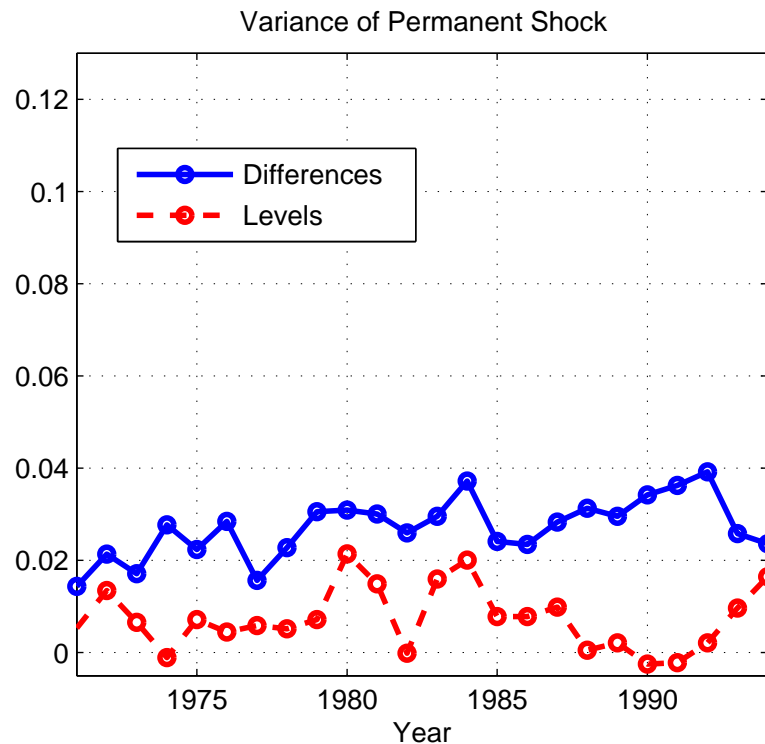
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Misspecification of the error-component model?

Implications of estimates for life-cycle inequality (UK)

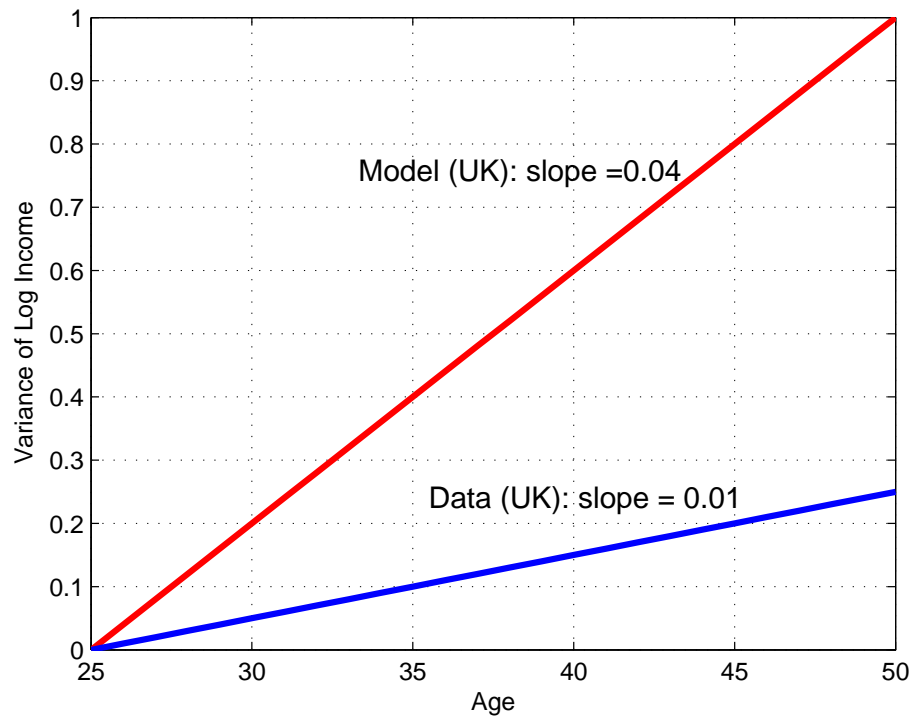
Permanent shocks cumulate over the life-cycle

Var. of log disp. income grows linearly with age **at rate $var(\zeta)$ per year**

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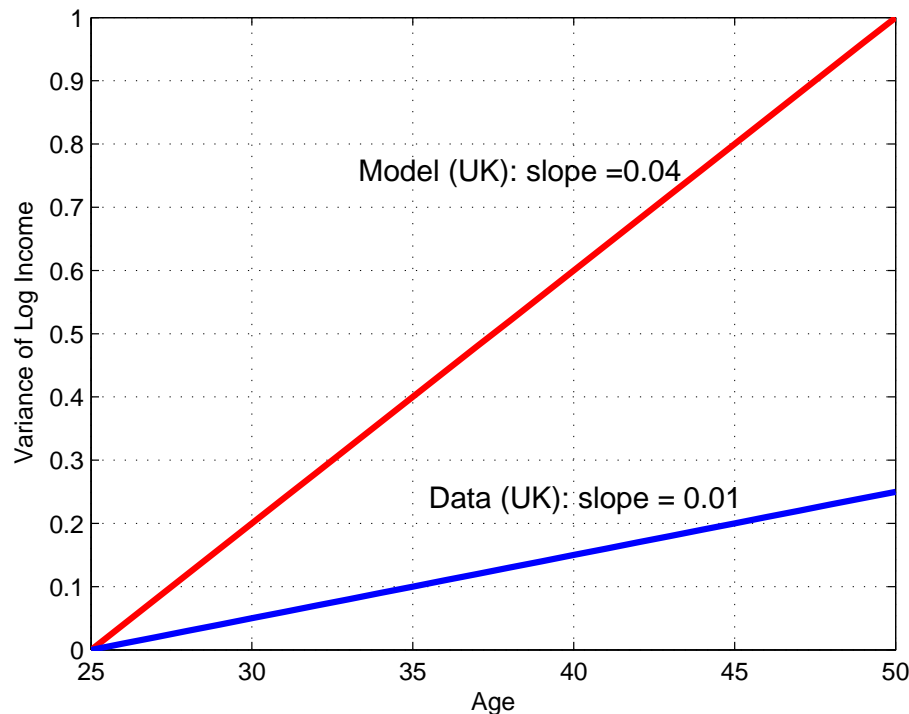
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Implications of estimates for life-cycle inequality (UK)

Permanent shocks cumulate over the life-cycle

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Estimates in first diffs. grossly **overestimate** life-cycle inequality growth

What if the true DGP is an AR(1) instead?

$$y_{it} = p_{it} + \nu_{it}$$
$$p_{it} = \rho p_{i,t-1} + \zeta_{it}$$

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Results from simulated buffer-stock model (Kaplan-Violante, 2010)

Autocorr. Coeff.	ϕ
$\rho = 1.00$	0.77
$\rho = 0.97$	0.67
$\rho = 0.95$	0.62
$\rho = 0.93$	0.58

Size of pass-through to consumption is decreasing in ρ because precautionary wealth is larger for smaller ρ

3. BPP pass-through coefficients biased upward when liquidity constraints bind

Identifying assumptions underlying BPP methodology

$$\phi = \frac{\text{cov}(\Delta c_{it}, \zeta_{it})}{\text{var}(\zeta_{it})}$$

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BPP methodology requires the identifying assumption:

$$\text{cov}(\Delta c_{it}, \nu_{i,t-2}) = 0$$

Kaplan-Violante (2010): “short-memory” of consumption allocation

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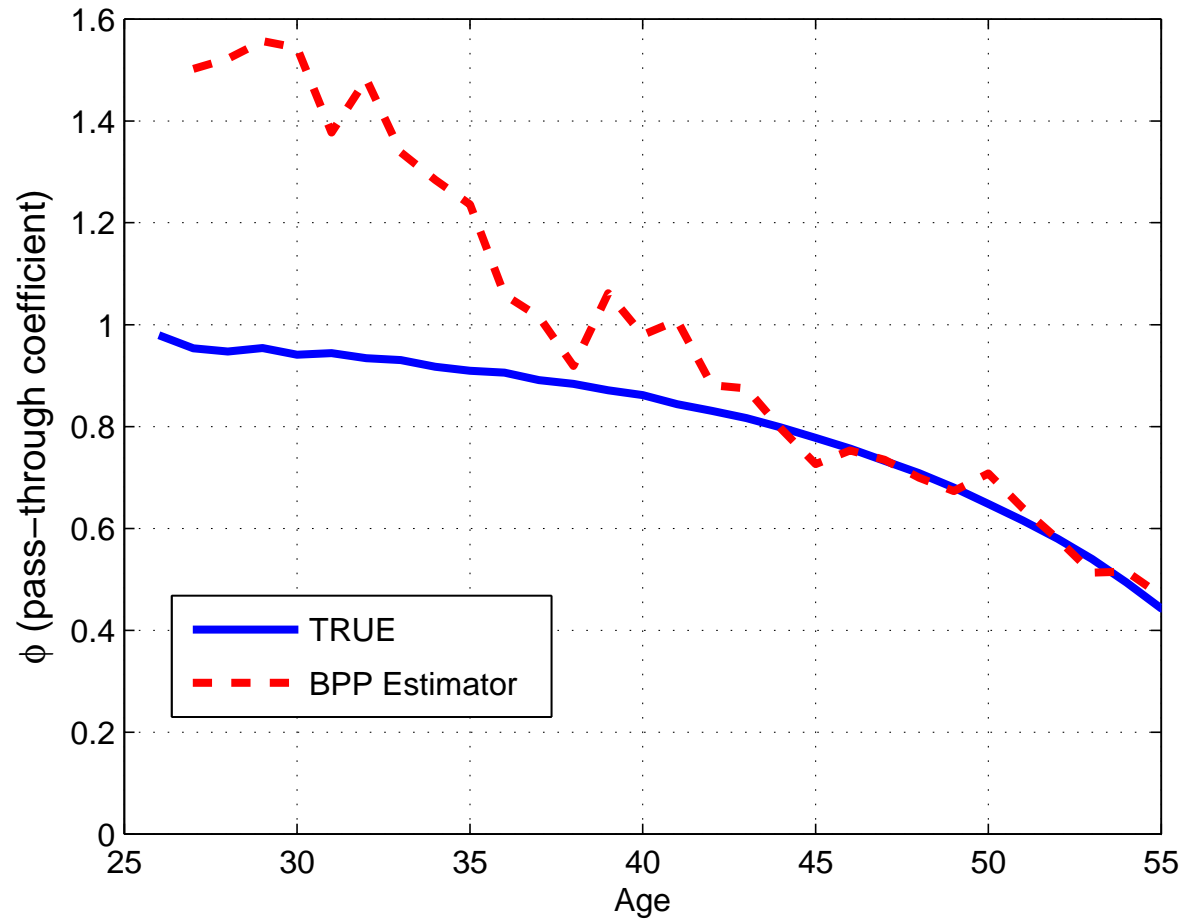
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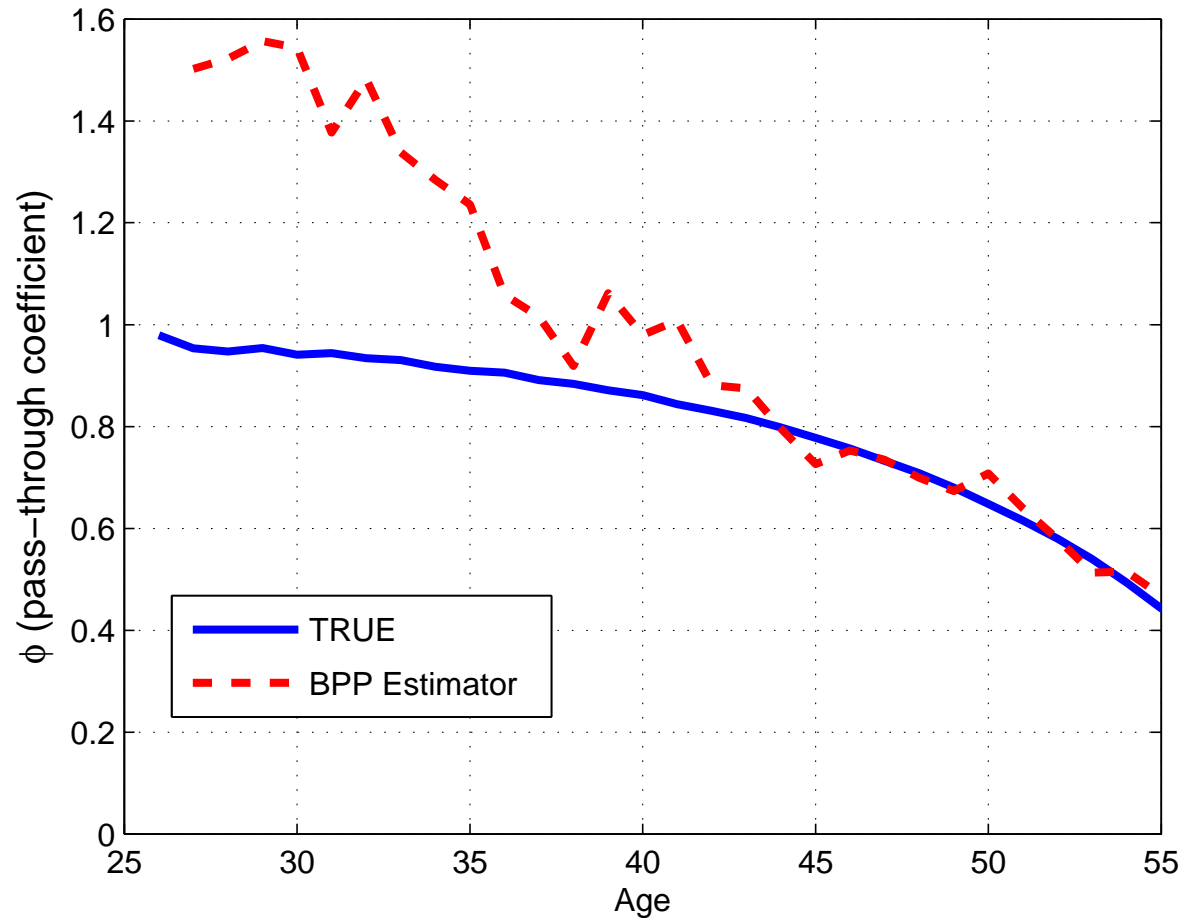
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Assumption **violated** if borrowing constraints bind often

Simulations from life-cycle buffer-stock model



Simulations from life-cycle buffer-stock model



Upward bias in $\hat{\phi}$ can explain pass-through from y to c above one

4. Shocks to financial and housing wealth crucial in the Great Recession

US households' wealth in the Great Recession

Age	Drop in Wealth (% of Income)	Drop in Income (% of Income)
20 – 29	78	11
30 – 39	128	12
40 – 49	173	9
50 – 59	221	9
60 – 69	284	6
<i>Average</i>	211	8

Source: Glover-Heathcote-Krueger-Rios Rull (2011)

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Wealth shocks **correlated** with income shocks (e.g., local economy)

Positive correlation can explain pass-through coefficients above one

Concluding thoughts

Estimates of income risk and pass-through are a **lower bound** for those during the Great Recession

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During economic downturns:

- Individual income risk **larger** (unemployment)
- Individual income risk **more costly** (cumulates with aggr. shocks)
- Channels of consumption insurance **function less well**