

Discussion of *HANKSSON*

**Monetary Policy Conference 2026
Banca D'Italia**

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18/06/2026

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$\underbrace{\frac{dc_t^H}{dc_t}}_{\beta_c^H}$ vs. $\underbrace{\frac{dc_t^S}{dc_t}}_{\beta_c^S}$

independent of MPCs

accounts for cyclical savings

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 3. Consistent with recent literature on high micro MPCs and low aggregate multipliers (Orchard et al. 2025)
 4. You need to be careful when conducting policy analysis using HANK models calibrated on labor earnings!

Comments Overview

1. MPC estimation and unemployment shock
2. Household-level robustness
3. The extensive margin of heterogeneity
4. Minor comments/clarifications

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- ▶ Concern: selection into unemployment, group-specific income persistence, and job-loss severity could mechanically drive part of the result.
- ▶ Suggestion: If available, report **Y** and **C** betas by industry of occupation and/or local labor-market exposure.

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 - * Table 1: **AMPC** and $\text{Cov}(MPC, \beta)$.
 - * Table 2: consumption betas by HtM status.
- ▶ This would also address transfers and benefits that are effectively received or pooled at the household level.

III. SS with cyclical HtM

- In the paper's fixed-share TANK benchmark:

$$\hat{c}_t = E_t \hat{c}_{t+1} - \tilde{\lambda}_c (\hat{\gamma}_t - E_t \hat{\gamma}_{t+1}) - \sigma r_t, \quad \hat{\gamma}_t \equiv \hat{c}_t^S - \hat{c}_t^H \text{ \& } \Gamma \equiv \frac{C_S}{C_H}$$

- A one-time real-rate cut implies:

$$\frac{d\hat{c}_t}{d(-r_t)} = \sigma \frac{1}{1 + \tilde{\lambda}_c \gamma_c}, \quad \gamma_c \equiv \frac{d\hat{\gamma}_t}{d\hat{c}_t}$$

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- With countercyclical idiosyncratic risk and HtM share:

$$\hat{\lambda}_t = \rho \hat{\lambda}_{t-1} - \eta \hat{c}_t + e_t,$$

$$\hat{c}_t = \Omega E_t \hat{c}_{t+1} - \tilde{\lambda}_c \left(\hat{\gamma}_t - \left(1 + \frac{\tilde{s}_\gamma - 1}{\tilde{\lambda}_c} \right) E_t \hat{\gamma}_{t+1} \right) - \tilde{\lambda}_c (\Gamma - 1)(1 - \rho) \hat{\lambda}_t - \sigma r_t.$$

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► Appendix derivation

III. The extensive margin of inequality

Cantore, Guerriero & Nisticò (2026): The Dark Side of HANK

- For the same one-time cut:

$$\frac{d\hat{c}_t}{d(-r_t)} = \sigma \frac{1}{1 + \tilde{\lambda}_c \gamma_c + \tilde{\lambda}_c (\Gamma - 1)(1 - \rho) l_\lambda}, \quad l_\lambda \equiv \frac{d\hat{\lambda}_t}{d\hat{c}_t}$$

- Therefore amplification requires:

$$-1 < \underbrace{\tilde{\lambda}_c \gamma_c}_{\text{intensive margin}} + \underbrace{\tilde{\lambda}_c (\Gamma - 1)(1 - \rho) l_\lambda}_{\text{extensive margin}} < 0$$

- A countercyclical HtM share, $l_\lambda < 0$, **amplifies** the effect of the rate cut.
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 - * $\Gamma (> 1)$ amplifies.
 - * $\rho (\in (0, 1))$ dampens.
- Can your data measure this? Consumption is observed at high frequency, but wealth-based HtM status appears annual. An annual time series of the HtM share could be informative.

Minor comments/clarifications

1. What if MPCs are state dependent/time-varying?
 - * Can you estimate the MPC distribution separately in high- and low-unemployment years, or interact the unemployment-induced income shock with aggregate/local unemployment?
 - * If MPCs are countercyclical, does the **AMPC** and multiplier conclusion remain close to neutral in recessions?

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 - * Can you estimate the MPC distribution separately in high- and low-unemployment years, or interact the unemployment-induced income shock with aggregate/local unemployment?
 - * If MPCs are countercyclical, does the **AMPC** and multiplier conclusion remain close to neutral in recessions?
2. You argue that transfers, more than taxes, flatten income betas. Can you decompose them by unemployment insurance, pensions/disability, child benefits, and other transfers? This would make the automatic-stabilizer mechanism more persuasive.

Thank you!

Appendix: transitions and groups

- ▶ Two groups: savers S and hand-to-mouth households H .
- ▶ **Cyclical and independent** transition probabilities:

$$\hat{s}_t = \eta_S \hat{c}_t + e_{S,t} \quad \hat{h}_t = -\eta_H \hat{c}_t + e_{H,t}$$

where s_t is the probability of remaining a saver and h_t is the probability of remaining HtM.

- ▶ Law of motion for the HtM population share λ_t :

$$\lambda_t = h_t \lambda_{t-1} + (1 - s_t)(1 - \lambda_{t-1}) = (s_t + h_t - 1) \lambda_{t-1} + 1 - s_t.$$

- ▶ Log-linearized share dynamics:

$$\hat{\lambda}_t = \rho \hat{\lambda}_{t-1} - \eta \hat{c}_t + e_t,$$

where

$$\rho = s + h - 1 = 1 - \frac{1-s}{\lambda} \in (0, 1), \quad \eta = \frac{(1-\lambda)s}{\lambda} \eta_S + h \eta_H > 0, \quad e_t = h e_{H,t} - \frac{(1-\lambda)s}{\lambda} e_{S,t}.$$

Appendix: saver Euler

- Saver Euler with idiosyncratic transition risk:

$$C_{S,t}^{-1/\sigma} = \beta(1+i_t)E_t \left\{ \frac{s_{t+1}C_{S,t+1}^{-1/\sigma} + (1-s_{t+1})C_{H,t+1}^{-1/\sigma}}{1+\pi_{t+1}} \right\}.$$

- Define $\hat{\gamma}_t \equiv \hat{c}_{S,t} - \hat{c}_{H,t}$, $r_t \equiv \hat{i}_t - E_t \hat{\pi}_{t+1}$, and

$$s_\gamma \equiv s + (1-s)\Gamma^{1/\sigma}, \quad \tilde{s}_\gamma \equiv \frac{s}{s_\gamma}.$$

- Log-linear saver Euler:

$$\hat{c}_{S,t} = E_t \hat{c}_{S,t+1} - (1-\tilde{s}_\gamma)E_t \hat{\gamma}_{t+1} - \sigma r_t + \tilde{s}_\gamma \sigma (\Gamma^{1/\sigma} - 1) E_t \hat{s}_{t+1}.$$

Appendix: aggregation

- ▶ $C_{H,t} = (1 - \tau)WN_{H,t}$ and $C_t = Y_t$
- ▶ Aggregate consumption:

$$C_t = (1 - \lambda_t)C_{S,t} + \lambda_t C_{H,t}.$$

- ▶ Define the steady-state HtM consumption share and relative consumption:

$$\tilde{\lambda}_c \equiv \lambda \frac{C_H}{C}, \quad \Gamma \equiv \frac{C_S}{C_H}.$$

- ▶ Log-linear aggregation:

$$\hat{c}_t = (1 - \tilde{\lambda}_c)\hat{c}_{S,t} + \tilde{\lambda}_c\hat{c}_{H,t} - \tilde{\lambda}_c(\Gamma - 1)\hat{\lambda}_t.$$

- ▶ Using $\hat{\gamma}_t = \hat{c}_{S,t} - \hat{c}_{H,t}$:

$$\hat{c}_{S,t} = \hat{c}_t + \tilde{\lambda}_c\hat{\gamma}_t + \tilde{\lambda}_c(\Gamma - 1)\hat{\lambda}_t.$$

Appendix: aggregate Euler

- Substitute the aggregation identity into the saver Euler:

$$\begin{aligned}\hat{c}_t = & E_t \hat{c}_{t+1} - \tilde{\lambda}_c \hat{\gamma}_t + [\tilde{s}_\gamma - (1 - \tilde{\lambda}_c)] E_t \hat{\gamma}_{t+1} \\ & - \tilde{\lambda}_c (\Gamma - 1) (\hat{\lambda}_t - E_t \hat{\lambda}_{t+1}) - \sigma r_t + \tilde{s}_\gamma \sigma (\Gamma^{1/\sigma} - 1) E_t \hat{s}_{t+1}.\end{aligned}$$

- The cyclical transition probabilities imply

$$E_t \hat{s}_{t+1} = \eta_S E_t \hat{c}_{t+1},$$

and

$$E_t \hat{\lambda}_{t+1} = \rho \hat{\lambda}_t - \eta E_t \hat{c}_{t+1}.$$

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► Hence:

$$\hat{c}_t = \Omega E_t \hat{c}_{t+1} - \tilde{\lambda}_c \left(\hat{\gamma}_t - \left(1 + \frac{\tilde{s}_\gamma - 1}{\tilde{\lambda}_c} \right) E_t \hat{\gamma}_{t+1} \right) - \tilde{\lambda}_c (\Gamma - 1) (1 - \rho) \hat{\lambda}_t - \sigma r_t.$$

► where

$$\Omega = 1 - \tilde{\lambda}_c (\Gamma - 1) \eta + \tilde{s}_\gamma \sigma (\Gamma^{1/\sigma} - 1) \eta_S.$$

◀ Back