



FISCAL AFFAIRS

**Discussion on
“Brothers in Arms: Monetary-Fiscal
Interactions Without Ricardian
Equivalence” by Rachel and Ravn**

**IMF–BOCCONI UNIVERSITY–BANCA D’ITALIA CONFERENCE
JUNE 4-5, 2026**

DAVIDE FURCERI

Fiscal Affairs Department, IMF

Disclaimer: The views expressed herein are those of the authors and should not be attributed to the IMF, its Executive Board, or its management

The paper: New mechanism on MF interaction without RE

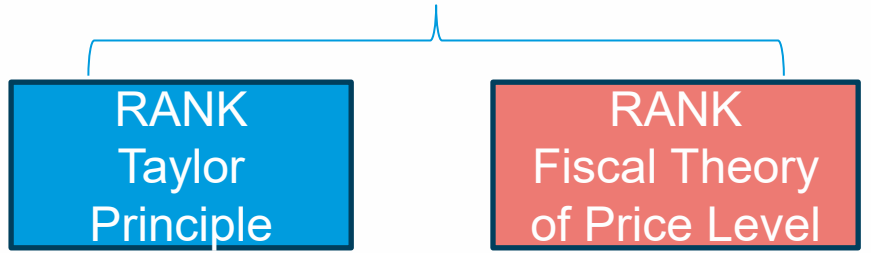
Output $\hat{y}_t = E_t \hat{y}_{t+1} - i_t + \chi \hat{v}_t + (1 - \chi\gamma) E_t \hat{\pi}_{t+1}$
 Inflation $\hat{\pi}_t = \beta E_t \hat{\pi}_{t+1} + \kappa \hat{y}_t$
 Real debt $\hat{v}_t = \frac{1}{\beta} (\hat{v}_{t-1} - \hat{s}_t) + \gamma \left(i_t - \frac{1}{\beta} \hat{\pi}_t \right)$
 Transfer rule $\hat{s}_t = \alpha_b (\hat{v}_{t-1} - e_t^s) + \alpha_x \hat{y}_t + e_t^s$
 MP rule $i_t = \phi_\pi \hat{\pi}_t + \phi_x \hat{y}_t + e_t^i$

RANK-based model: $\chi = 0$

$$\hat{y}_t = E_t \hat{y}_{t+1} - i_t + E_t \hat{\pi}_{t+1}$$

Debt has no direct impact on household consumption

**Policy regimes sharply split:
(Fiscal and Monetary policy rule)**



This paper's NOVELTY: $\chi > 0$

$$\hat{y}_t = E_t \hat{y}_{t+1} - i_t + \chi \hat{v}_t + (1 - \chi\gamma) E_t \hat{\pi}_{t+1}$$

- Finitely-lived households (Blanchard-Yaari perpetual youth model) → **Non-Ricardian economies**
- Public debt becomes perceived household wealth ($\chi > 0$)
- Two-way monetary-fiscal interactions
 - MP → FP: Inflation and interest rates affect debt (*usual accounting channel*)
 - FP → MP: Fiscal deficits directly affect aggregate demand and inflation [*via wealth effect*]

Five Key Results

Rachel & Ravn show that once Ricardian equivalence fails, fiscal policy is no longer a background object. Public debt becomes household wealth, affects aggregate demand, and changes the determinacy properties of the New Keynesian model.

R1

No active/passive divide

Determinacy region is a connected set (not divided by β). The usual distinction between active and passive policy regimes disappears.

R2

Taylor principle fails

- Neither necessary (HANK channels substitute)
- Nor sufficient (explosive region expands for large β).

R3

Deficits are inflationary

Across the full determinacy region — not just the FTPL corner. Fiscal transfers stimulate demand directly.

R4

Timing matters

Surprise deficits: output boom + inflation.
Pre-announced: stagflationary — inflation erodes wealth before transfer arrives.

R5

Robust in medium-scale model

Results survive the introduction of capital, sticky wages, investment adjustment costs, long-term government debt, and interest-rate smoothing. *Debt maturity matters.*

1a: How large is the effective debt-wealth channel?

→ how to empirically discipline the strength of debt-wealth channel relative to other HANK mechanisms (*binding borrowing constraints, heterogeneous MPCs, portfolio composition effects*)?

- Public debt is household net wealth, so the wealth channel is not empirically disciplined by the distribution of bond holdings across the MPC distribution
- Bond holdings are concentrated among low-MPC households, the net demand stimulus from deficit financing might be much smaller. In other words, $\chi_{\text{effective}} < \chi_{\text{OLG}}$
- *Implications:*
 - inflationary pressure from deficit-financed expenditure will be smaller
 - the recessionary effects of pre-announced deficits would be attenuated.
 - determinacy regions may move closer to the RANK benchmark if $\chi_{\text{effective}}$ is small

1b: Taylor Principle and determinacy: Rachel–Ravn vs. Bilbiie

- **Rachel & Ravn (2025): *debt-wealth channel*** → determinacy depends jointly on monetary and fiscal rules
- **Bilbiie (2025): *distributional income channel*** → heterogeneity changes the aggregate IS curve through cyclical inequality

- **Bilbiie (2025)** emphasizes the “Catch-22” problem: aggregate-demand amplification requires countercyclical inequality, but solving the forward guidance puzzle requires procyclical inequality
- Does the **Rachel–Ravn** mechanism survive when combined with cyclical inequality, risk, and forward-guidance considerations

2: Discussion on dynamic profile of MPCs

$$\chi = \frac{(1-q)(1-q\beta)}{q}$$

- χ is the crucial parameter in the model, which depends on the households' subjective discount factor (β) and the survival probability (q).
- The calibration maps q to generate an MPC of 0.26, matching the **average MPC**
- ➔ This OLG-based approach may be limited in matching the **dynamic profile** of MPCs observed in standard HANK models: Fiscal transfers often generate **a very front-loaded intertemporal-MPC** profile because constrained households spend quickly ➔ A richer HANK model may generate a sharper impact response and faster decay than the OLG model

This matters given the discussion of the paper on the persistence and timing of shocks ➔ It would be useful to benchmark the results with standard HANK models

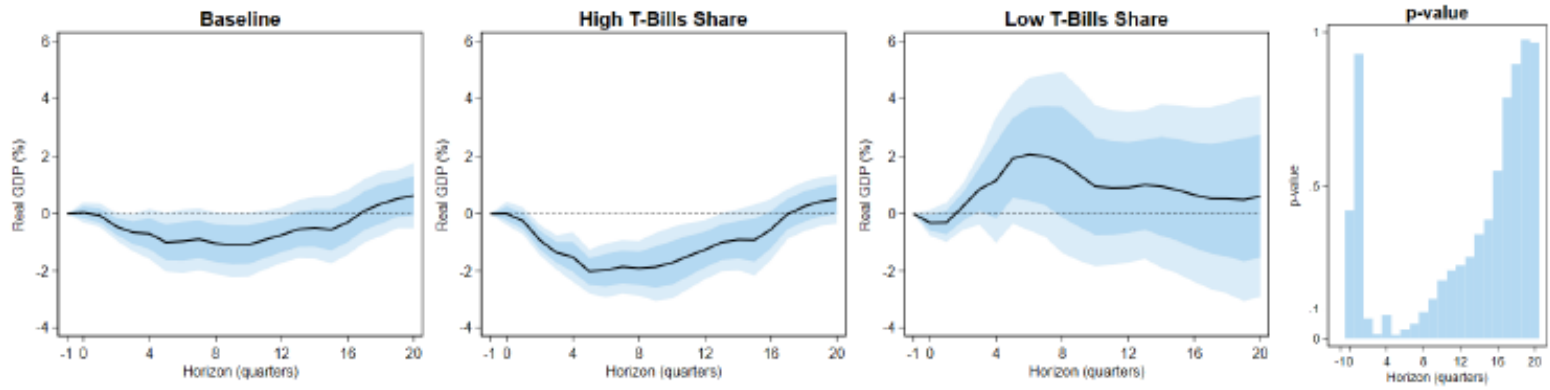
3: Going beyond lump-sum fiscal instruments

- The paper focuses on the lump-sum transfers and emphasizes the inflationary effects of deficits. The result may be instrument-specific, depending on the balance between demand-side and supply-side effects
- **An increase in public investment** raises short-term inflation in short term due to high aggregate demand, but possibly causes disinflation over the medium-term due to supply expansion
- **A consumption tax cut** is possibly disinflationary (mechanically on impact)
- **A cut in capital tax rate** boosts demand, but may also raise investment and future productive capacity

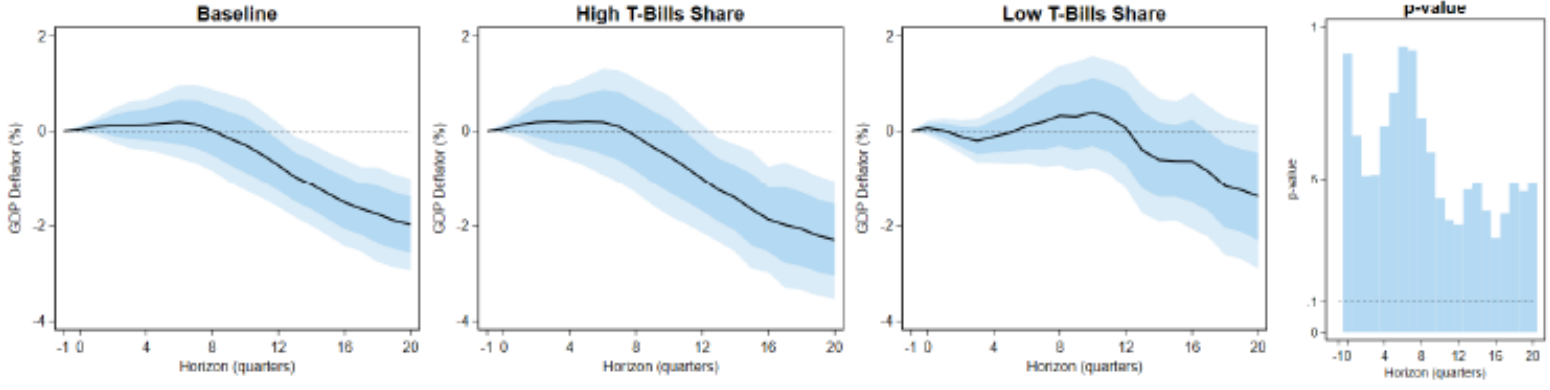
4: Empirical discipline of MP under different debt maturity

- In the model, monetary policy is more powerful when public debt maturity is longer (capital gains following interest rate cuts)...but opposite in the data

Panel A. Real GDP



Panel B. GDP Deflator



Source: Bettarelli et al. (forthcoming)

5: What if borrowing costs respond endogenously to debt?

- Higher debt may also raise **debt-sustainability concerns**, leading investors to demand a higher sovereign risk premium (Furceri et al. 2025, Plante et al. 2025, and Laubach 2009)
- Debt-financed expenditure could further crowd-out investments, limiting the stimulus impacts via wealth-channel
- *Allow the government borrowing cost to depend on debt or fiscal balances and examine how this modifies the determinacy regions and deficit-inflation results*

Thank You