Panel Discussion on Monetary policy and Productivity: Implications for Monetary and Fiscal Policy

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Monetary Policy and Structural Tectonic Shifts

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Beyond the Short Run: Monetary Policy and Innovation Investment (Elfsbacka-Schmöller et al. (2024))

Systematic euro area monetary tightening:

- Pronounced investment reduction in short-term (average: -20%); exit from innovation activity.
- Persistent, medium-run innovation cuts.

	Reduce	No Change	Expand	Total
% of firms	33%	58%	9%	100%
Average change	-67%	0	+23%	-20%
N				2593

Exogenous monetary policy shifts

- Innovation investment responds to **both rate hikes and cuts**.
- Potential state-dependent asymmetry.

Longer-term, supply-side effects of forward guidance: strong innovation response to communication.

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1. Monetary policy transmission through technology growth and long-run supply.
2. Long-run non-neutrality of monetary policy.
3. Policy-endogeneity of R^*.

Strong Link Between Monetary/ Fiscal Policy and Innovation

Monetary policy $\Rightarrow$ innovation

- Long-run effects of monetary policy (Jordà et al. (2024)).
- Monetary policy $\Rightarrow$ R&D, TFP (Moran and Queralto (2018), Ma and Zimmermann (2023), Elfsbacka-Schmöller et al. (2024b)).

Fiscal policy $\Rightarrow$ innovation

- Demand shocks $\Rightarrow$ firms' innovation, technology growth (Ilzetzki, 2024; Elfsbacka-Schmöller et al. (2024a)).
- Persistent effects of fiscal policy shifts via R&D investment expansions (Antolin-Diaz and Surico (2024), Fieldhouse and Mertens (2024), Cloyne et al. (2022)). (2024b)).

But: existing wisdom and policy implications are derived from **frameworks which ignore the link between monetary/ fiscal policy and growth**.

Rethinking Price-Debt Stabilization (Elfsbacka-Schmöller and McClung (2024))

- Current high debt/ high government spending environment, recent high inflation episode
- Wide debate on joint stabilization of prices and public debt:
  - **Key limitation:** Models assume exogenous/no innovation and technology growth
  - Focus only on debt/GDP numerator, ignoring empirical demand-growth linkages
- Standard implications under exogenous growth:
  1. Strong “fiscal” inflation as the necessary consequence of unfunded fiscal deficits (“active" fiscal policy)
  2. Debt-stabilization through inflation only if central bank lets real rates fall (Taylor principle violated)
  3. Taylor principle needed under debt-stabilizing (“passive") fiscal policy

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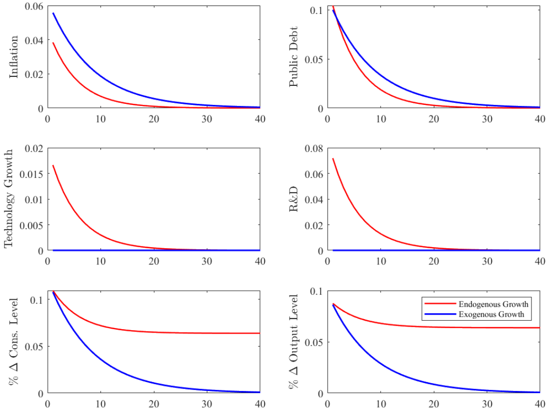
What we do: link technological innovation, long-run growth, and monetary-fiscal policy coordination

Public Debt, Inflation, and Innovation

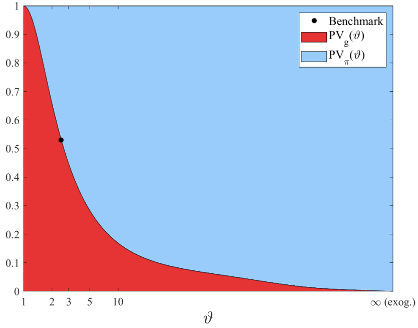


Technology-led growth stabilizes public debt

- Fiscal capacity becomes endogenous: demand $\uparrow \rightarrow$ R&D $\uparrow \rightarrow$ growth $\uparrow$
- Innovation-driven output expansion helps financing the fiscal deficit.
- Growth-financing of public debt reduces the extent of fiscal inflation.

Implications of Supply-driven Debt Stabilization

Technology-led growth important contributor to debt stabilization:



- Technology-led growth expands monetary and fiscal policy space
- Policy-endogenous R^*: monetary/ fiscal policy $\rightarrow$ R&D $\rightarrow$ growth
- Growth-augmented Taylor principle: central banks should account for the adjustment of the real interest rate (r) relative to the growth rate (g)
- Crucial: R&D-led growth does not imply a fiscal free lunch ($r > g$; risk of deficit-driven inflation surges)

Concluding Remarks

- Monetary policy affects innovation and technology growth (systematic monetary policy, monetary policy shocks, forward guidance).
- Conventional wisdom on monetary-fiscal interactions omits a potentially important channel: policy transmission via R&D and long-run aggregate supply.
- Unfunded fiscal deficits may not only stimulate demand but can also raise innovation-driven productivity growth and trend output
  - Partially self-financing deficits through the supply side and mitigating inflationary pressures.
  - Due to the expansion in fiscal capacity, monetary policy can respond more aggressively to inflation than previously suggested.