Optimal Macroeconomic Policies in a Heterogenous World

By Bullard, DiCecio, Singh, and Suda

Discussion by Christopher D. Carroll

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Thank you to James Bullard

- For his leadership in turning Federal Reserve Banks into research powerhouses.
- FRED and its awesome API.

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Post Sheedy/Werning agenda: add heterogeneity and more realistic policies.

Latest update hot off the press: This paper.

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> "If you are out to describe the truth, leave elegance to the tailor."

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- Does their solution capture the essential role of heterogeneity?
    - It's all about uncertainty.
    - In the abstract, the authors say

> *"The economy features ... both permanent and temporary idiosyncratic risk"*.

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    - In both anticipation and reaction to macroeconomic shocks and policies.
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    - Financial system effectively lends nominal money from wealthy to others.
    - Inflation redistributes in a big way.
- These facts arise from the concavity of the consumption function.
    - This lies at the heart of the implications for heterogeneous macro.
    - Simplest channel is via differential MPCs.
    - Another is quite different responses to changes in uncertainty.

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- With probability p household i becomes unemployed and receives UI benefits
- Otherwise households receive the wage w_t

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Their first elegant assumption:

> *"An agent receiving an unemployment insurance payout... receives the labor income they would have received if they had been able to work.."*

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Their second elegant assumption:

> *"Each incoming ... household is ... endowed with a productivity profile. The value of the realization ... dictates the entire lifetime profile of productivity... "*

Doubly elegant

- They change the solution to the problem profoundly.
- This is the key to being able to solve with paper and pencil.

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Monetary policy rule

- passes aggregate shocks directly to consumers

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    - Yes, large empirical literature on countercyclical income risk. (Storesletten,Telmer, and Yaron 2004, Guvenen, Ozkan, and Song 2014, ...)

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- Does it vary over the business cycle?
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- Does it matter?
    - Yes, theoretical literature shows countercyclical Urisk as an amplifier of business cycles. (Den Haan et al. 2017, Ravn and Sterk 2017, Schaab 2020, Graves 2023,...)
    - Urisk increases precautionary saving driving down spending and further increasing Urisk.

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- Consider a computational HANK and SAM (Ravn and Sterk 2017)
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    - For details of the model see Will Du's slides (PhD student at Johns Hopkins University)

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- How much does unemployment risk amplify business cycle fluctuations?

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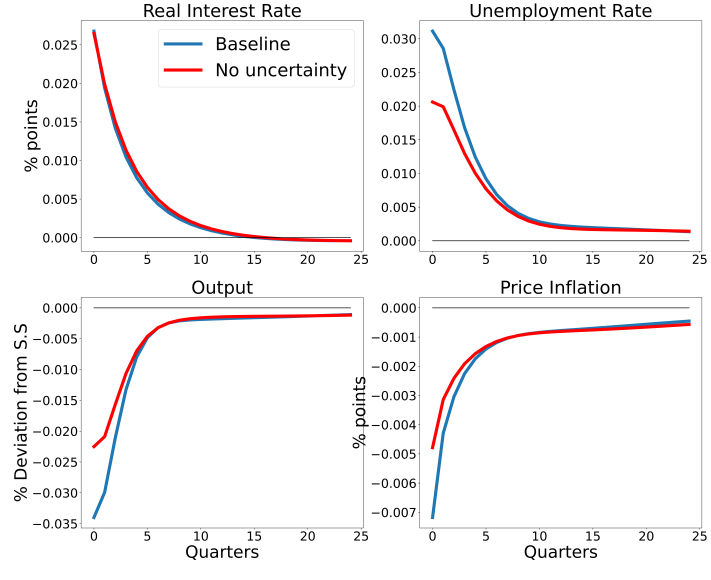

The uncertainty multiplier is missing from Bullard et al. yet accounts for almost half of the GDP decline.

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- Literature on fiscal policy emphasizes the role of UI in mitigating Urisk:
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    - as a discretionary tool (Kekre 2021, Carroll et al. 2023)

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- With countercyclical Urisk:
    - welfare loss from nominal contracting friction likely to be insignificant.
    - Nominal GDP targeting will exacerbate welfare loss from lack of price and output stabilization.

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    - So we can be clear in how they deviate and their plausibility.
- This model may serve as a benchmark in that sense.
- I am not persuaded that it is likely to end up being a persuasive case.
    - For an actually desirable recipe for monetary policy.
    - Or other kinds of macroeconomic decisionmaking.