

# 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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# Is this paper simpler than possible, and too elegant?

- 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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(Storesletten, Telmer, and Yaron 2004, Guvenen, Ozkan, and Song 2014, ...)
- 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)
  - Matches wealth distribution.
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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?

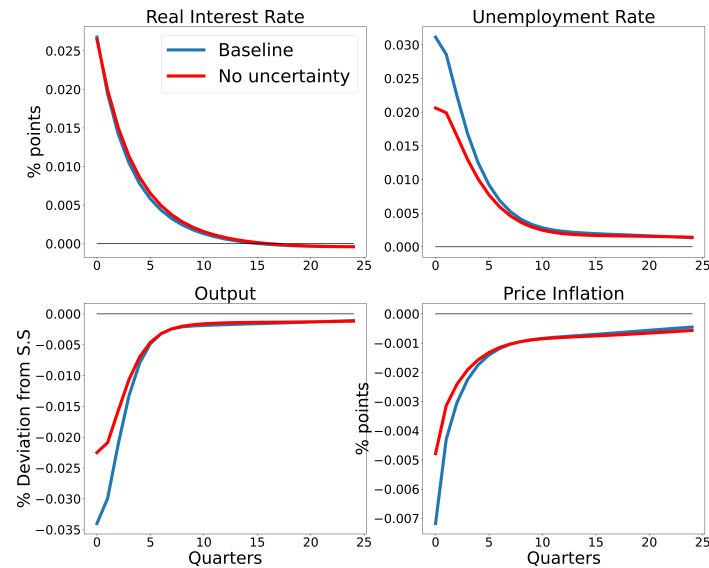
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The uncertainty multiplier is missing from Bullard et al. yet accounts for almost half of the GDP decline.

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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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  - as an automatic stabilizer (Mckay and Reis (2016,2021), Graves 2023,..)
  - as a discretionary tool (Kekre 2021, Carroll et al. 2023)
- 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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- Baseline models are often useful in organizing the benchmark wrt which richer models deviate.
  - 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.

