

Data and models in central banks

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*Quantitative tools for monitoring macroeconomic
and financial conditions*

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What I will try to do

1. Offer my view on the use of data/econometric tools in CBs
2. Comment on “the return of the living dead,” i.e. reduced-form tools

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- Different policy tasks may require different models

Data, models, and monetary policy implementation

- Example: consider a simple Taylor rule

$$i_t = r_t^* + \phi\pi_t - \gamma(u_t - u_t^*)$$

Data, models, and monetary policy implementation

- Models to filter data useful at three levels of the MP implementation
 - Representative of more complex problems

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 - Rules or discretion?
 - What type of rule?
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Reduced-
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1. A view on the use of data/econometric tools in CBs

- Mix of methods seems appropriate
 - More or less structural approaches useful for tasks requiring a different positioning on the “ambition-misspecification” trade-off frontier
- DSGEs remain the only game in town for most strategic questions
- Important to stress, given recent attacks to DSGE literature
 - Some of these criticisms are motivated, but I do not yet see any alternative

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- Academic work
 - Greater emphasis on the transparency and crispness of the theoretical intuition
 - Prefer smaller model to single large-scale framework
 - Emphasis on uninsurable idiosyncratic risk and household heterogeneity

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- Clear advantages: Good-fitting models, more reliable estimates of
 - effect of exogenous developments
 - modest policy intervention

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- More of a concern in
 - academia, relative to central banks
 - applied micro, relative to macro

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