

Use of models at central banks: Comments

Gunnar Bårdsen

Department of Economics
NTNU, Trondheim

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At the model shop

What would you like?

- Communication
- Reality check
- Forecasting
- Policy analysis

In stock

- Calibrated theory
- VAR (Structural & Bayesian)
- Econometric model
- DSGE

What to take?

Calibrated theory

- ▶ non-realistic

VAR & econometric model

- ▶ non-constant

DSGE

- ▶ non-robust

Winnie the Pooh solution:
Yes, please.

The devil's dictionary

Apologies to Ambrose Bierce

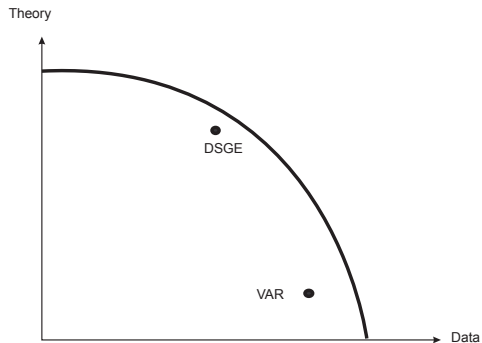
- Aggregate dynamic econometric models
 - ▶ Estimates of "something"
- Structural VARs
 - ▶ How to estimate models **inefficiently**
- Bayesian estimation
 - ▶ Calibration called estimation
- DSGE & Microfoundations
 - ▶ Sophisticated naivety

What to choose

- "Core" or "suite"
- Why?
- Why not core?
- What suite?
- Suite
- Competition & diversification
- Models come...models go...
- "Story"-model
- Data-based forecasting model
 - ▶ **Must be transparent**
- Laboratory

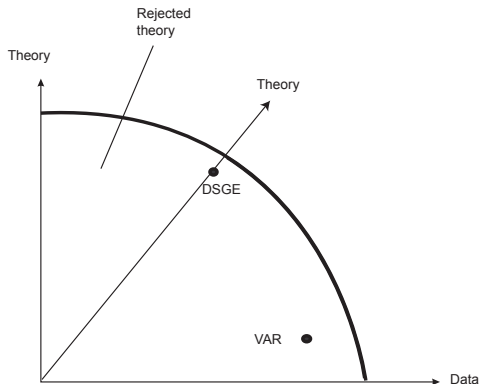
How much reality?

The Pagan frontier...



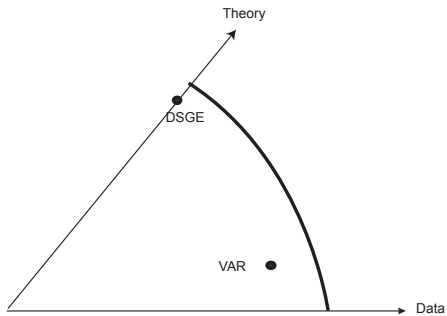
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Microfoundations...

The times they are achanging

Behavioural economics

- hyperbolic discounting: time inconsistency
- learning: expectations change
- herd behaviour: asset bubbles
- fair treatment: backward-looking behaviour (Driscoll & Holden)

But see Backus, Routledge & Zin: "Exotic preferences for macroeconomists"

If core...

- Danger: vested interests
 - ▶ Any new model is a success by default
- Economies are highly non-linear & non-constant
- Go for robustness & pragmatism:
- Build in blocks
- Pick "best" theory-consistent model for each block
- If any common framework: steady-state medium term growth
- Bårdsen, Hurn & Lindsay: approximations imply EqCM
- Cointegration provides the steady-state.