Use of models in Finance Ministries – an overview

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What is a "good" model?

- Purpose/questions
  - Forecasting
  - Stabilization policy
  - Structural policy (identification of long-run problems)
- Theoretical foundation
  - Consistency (national accounts…….)
  - Behavioural responses (structural policy)
- Empirical validation

Theoretical foundation - microfoundation

- I: Keynesian models
  - Microfoundation of the deman side – consumption function etc….

- II: Supply side

- III: Explicit intertemporal models
  - RBC/DSGE
  - Trend vs. cycle

- General equilibrium (does not imply a particular model; many equilibrum concepts!)

- Aggregation - problematic

- Expectations – important, but rational/model-consistent?

- Lucas Critique
  - All models suffer from the Lucas critique!
  - Assumptions about market structure, information, price contracts etc are not necessarily policy invariant
  - Cannot be avoided but must be considered in any model application

- DSGE
  - Models developed to make welfare assessments
  - Seldom done in macro-applications!

Challenges

- Intertemporal choices:
  - "too" much forward-looking/rational?
  - Perfect capital markets /role of borrowing constraints
  - Expectations

- Real-Financial interactions

- Supply side: price-wage formation

- Dynamics: Endogenous persistence

- DSGE-models – plausible link for AD effects?

Fiscal policy

- Transmission of fiscal policy changes

- Tax bias?

- Effects of expenditures – seldom modelled/differentiated, e.g. a change in child-care may have supply-side effects.

- DSGE-model: How to model an inconsistent policy

Comprehensiveness

- What are the questions we want to answer?

- Different questions = different models

- Portfolio of models –depending on questions asked

- Virtue of small models (management, flexibility, overview…….)

Institutional Framework

- Model environment /users/developers/research

- Independent use/forecasts/assessments – control/credibility

- Model competition