Central Banks: Current Experiences and Views on the Next Generation of Policy Models

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Panel Questions

1. What economic phenomena are not well captured by current policy models?

2. What assumptions or other methodological elements pose the largest impediments?

3. What new model features should be incorporated?

4. What will be the most difficult technical challenges?
VERY EASY
EASY
NORMAL
HARD
IMPOSSIBLE
Outline

- Some key phenomena that are not well-captured:
  - Importance of the financial system
  - Prolonged effects of recessions
  - Behaviour of expectations

- Principles for the forward agenda
Importance of the Financial System

- Broad agreement on need to improve real-financial linkages

- Need to be able to evaluate:
  - Financial sector as a source of shocks
  - Propagation of shocks through financial system
  - New policy tools and regulatory changes
  - UMP transmission mechanism

- Still at the “spaghetti test” stage
Structural versus cyclical changes in debt

Household debt-to-disposable-income ratio
Prolonged effects of recessions
Prolonged effects of recessions

- Hysteresis
  - Employment (e.g., Blanchard and Summers, 1986)
  - Trade (e.g., Baldwin and Krugman, 1989)

- Coordination failure
  - Diamond (1982) coconut model
  - Schaal and Taschereau-Dumouchel (2015)
Behaviour of expectations

% Dev. From old SS

Consumption

Expectation of Steady-State GDP

% Dev. From old SS
Behaviour of expectations

- Agents in the model know:

  1) What shock occurred
  2) The persistence of the shock
  3) How the shock will propagate
  4) That all other agents know (1), (2) and (3)
Behaviour of expectations

- Several alternatives to full information rational expectations:
  - Fully rational approach:
    - Lucas-Phelps island model
  - Bounded rationality approaches:
    - Sticky information (Mankiw and Reis, 2002)
    - Rational inattention (Sims, 2003)
Principles

- **Microfoundations** crucial for:
  - Evaluating new policy tools
  - Analyzing impact of structural change

- **Multiple perspectives** key for risk management

- **Empirical discipline**
Thank you