A Model of
Monetary Policy and Risk Premia

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MFS 2014
Standard Model of Monetary Policy

- Newkeynesian model with nominal rigidities.

- Monetary policy can undo inefficiencies associated with prices not adjusting sufficiently fast.

- Let’s think about a positive technological shock.

- Systematic component vs. monetary policy shock.

- Historical reasons.
The Other Roles of Monetary Policy

- But many observers have emphasize that monetary policy can play many other roles.

- For example:

  1. Overcome frictions to trade (models where money is essential).
  2. Eliminate multiplicity of equilibria.
  3. Fiscal aspects.
  4. Redistribution.
  5. Interactions with financial markets.

- After all, Bagehot’s dictum is about averting crisis in financial markets (*Lombard Street*, Chapter 7, paragraphs 57-58).
New Generation of Models about Monetary Policy

- Point has been revived by the Great Recession.

- New generation of monetary policy models deal with two issues:
  
  1. Unconventional policy (usually linked with the zero lower bound of nominal interest rates).
  
  2. Feedbacks between financial markets and monetary policy.

- This paper by Itamar, Alexi, and Philipp (DSS) belongs to this second group, although it has much to say about the first set of issues as well.

- Hence, there is much to praise in it.
DSS: the Model

- Endowment economy.

- Two type of agents; one more risk tolerant than the other (banks vs. depositors).

- Agents trade a claim on the aggregate endowment.

- Exogenous reserve requirement.

- Central bank controls the supply of reserves via open market operations.

- Central bank set us the nominal interest rate and solve for the path of reserves that implements it.
DSS: the Results

- Lower nominal rates result in increased leverage, lower risk premia and overall cost of capital, and higher volatility.

- Effects of policy shocks amplified via bank balance sheet movements.

- Multimodal stationary density (Fernández-Villaverde and Rubio Ramírez, 2007, and Fernández-Villaverde et al., 2012).

- Analysis of policies:
  1. Greenspan put.
  2. Forward guidance.
Stationary density

\[ \eta \]  \[ \omega \]
The Way Forward

- Production economy.

- Quantitative exercises (calibration, matching model with the data).

- Financial market structure (role of intermediaries).

- Interactions with other motives for monetary policy.
Flowchart of the Model