

# Communicating Monetary Policy when the MPC Members Believe in Different Stories

by

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## Objective of paper

- Analyze monetary policymaking made by committees (MPCs)
- How should decision-making structure of the MPC be designed?
  - Should MPC members vote on the interest rate decision?  
(Conclusion-based voting.)
  - Should MPC members vote on factors that form the basis for the interest rate decision?  
(Premise-based voting.)
- Relevant and interesting issue with non-trivial answers and social-choice based insights

# Modelling approach

- MPC members agree on a decision rule:

$$i = f(p_1, p_2, \dots, p_k)$$

- The  $n$  MPC members have different premises, or, stories:

$$S_j = (p_{1,j}, p_{2,j}, \dots, p_{k,j}), \quad j = 1, 2, \dots, n$$

- Given these different perceptions about the economy, what to do?
- Authors focus on interest rate settings backed by *consistent* stories:

$$i' = f(S') \tag{3}$$

- Authors assume that each member's preferred interest rate is *consistent* with his/her premises:

$$i_j = f(S_j)$$

## General results

- Two main scenarios are compared:
  - Voting on  $i$ , and subsequently finding a consistent story
  - Voting on elements in  $S$ , and then determine the consistent  $i$
- The scenarios may differ significantly:
  - Voting on  $i$  gives  $i_m$ , but a consistent story,  $S_m$ , may differ from a story winning the vote among  $S_j$ s,  $S_{mpc}$ , leading to the consistent interest rate  $i_{mpc} = f(S_{mpc})$
- Hence, conclusion- and premise-based voting procedure deliver different stories and interest rates — this follows from an *aggregation inconsistency* called the “*discursive dilemma*”

## Specific results, 1

- So, what to choose?
- It is found that under a conclusion-based procedure the “winner interest rate” (by median voter), are associated with a unique consistent story: that of the median voter
- It is found that under a premise-based procedure, MPC members should vote on each premise to get a unique story:

$$S_{p_m} \implies i = f(S_{p_m})$$

## Specific results, 2

- These two specific procedures are compared, and the premise-based procedure is *the winner!*
  - In simulations with linear decision rule it entails lower RMSE of the premise variables (when compared to the true ones); a “committee gain” is present (the RMSE of  $i$  are the same)
  - With a non-linear decision rule, even with only one premise variable, a premise-based procedure is the winner.

## General comments

- Well motivated analysis, with some clear and intriguing examples
- Relevant for thinking about appropriate decision structure in MPCs
- Nice application of social-choice theory to monetary theory
- Clear policy recommendations:
  - Introduce premise-based decision procedures to obtain less surprises in consistent stories
  - Use central bank’s “core” models to facilitate premise-based decision making

## Specific comments: Reasonable assumptions?

- Stringent analysis given the assumptions, but many assumptions are strong and *ad hoc*
- *Any* story  $S_j$  is exogenously given
- *Any* story  $S_j = (p_{1,j}, p_{2,j}, \dots, p_{k,j})$  is internally consistent (no structure on any relationships between  $p_j$ s)
- *Any* story  $S_j$  gives member  $j$ 's preferred *and* consistent interest rate  $i_j = f(S_j)$
- *All* members agree on the decision rule (form and arguments)
- . . . any scope for real conflicts (or just information sharing) are absent



## Specific comments: Reasonable assumptions?

- What *is* the magic of consistent stories?

Why focus only on  $i' = f(S')$

- When voting on interest rates, and it is known there is dissent, it is not surprising if two stories are around; it may be helpful to know them!
- It is simply an assumption that consistency is “good” — in models in this vein, I prefer such things to be a *result*

- What *is* the magic of small RMSE of stories? Only that assumed in the paper. A very weak welfare criterion for a normative analysis (in the main example the nominal interest rate has identical RMSE under either procedure)

(And can one, e.g., have *wrong* preference-based premises?)

## Very specific comment:

### The one-premise example and non-monotonicity?

- Example uses New-Keynesian two-equation model, with optimal discretionary policy
- Decision rule becomes *non-linear* in structural variable  $\kappa > 0$ :

$$i_t = \frac{\kappa}{\kappa^2 + \lambda} u_t \quad (10)$$

- $\kappa$  is slope of Phillips curve (low  $\kappa$  means high degree of nominal rigidity)
  - $\lambda$  is relative weight on output versus inflation stabilization in loss function
- Application of model to economic structures, and a better welfare assessments are just around the corner

## Very specific comment:

### The one-premise example and non-monotonicity? (cont'ed)

- But, with welfare function specified properly,  $\lambda$  is function of  $\kappa$
- More nominal rigidity in the economy makes inflation more costly
  - So,  $\partial\lambda/\partial\kappa > 0$
  - Actually, it is the case that  $\lambda = \kappa\theta^{-1}$

- Hence,

$$i_t = \frac{\kappa}{\kappa^2 + \lambda} u_t = \frac{\kappa}{\kappa^2 + \kappa\theta^{-1}} u_t = \frac{1}{\kappa + \theta^{-1}} u_t$$

which is *monotonous* in  $\kappa$

- So, slightly disappointing example (another could very likely be dug up)

## General remarks

- The issue of central bank institutional design has been on the agenda in monetary macro for decades now
- Fruitful and lively area with enormous interaction between academics and practitioners
- The independent central bank, and to some extent inflation targeting, are robust recommendation of the large literature

## General remarks (cont'ed)

- The size of the (positive) welfare implications are yet to be assessed firmly
- The sub-literature on transparency, communication, decision-making structure, etc. has yet some way to go before *firmly rooted* quantification of costs and benefits are established
- So, more work and fewer mantras are needed!

## General concluding comments on paper

- Very interesting paper
  - Clearly and well motivated
  - Clearly and well presented
  - Clear policy implications
- Lots of “food for thought.” Still, I am not fully convinced
  - More “beef” is needed on the bones:
    - \* Find Nash equilibrium behavior under different procedures in a fully specified extensive-form, non-cooperative game
    - \* Any welfare gains of suggested policy reform must be much more evident