Rules vs. Discretion: A Reconsideration

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Rules and Discretion

- What is a monetary policy rule?
  - A fixed mapping from publicly observable information into **instrument** choices.
- What is monetary policy discretion?
  - Freedom to choose instruments as desired.

Consensus Supports Rules

- Kydland and Prescott (1977)
- Taylor (1993)
- Rules are the basis of modelling of central banks.
  - policy decisions are treated as merely random noise around rules
- House legislation requires Fed to treat the Taylor Rule as "reference" rule.

Today: Two Strong Reasons to Favor Discretion

- **Empirical** problem: a rule must be based on historical performance.
  - past success is no guarantor of future reliability
- **Theoretical** problem: much useful information is *non-rulable.*
  - Can't encode all predictive factors into a fixed rule.

On the Empirical Problem

- I document that in 2009-10, Federal Open Market Committee (FOMC) aimed for a slow recovery in UR and inflation.

- Why did FOMC support a slow recovery?

- It relied on its pre-2007 reaction function (Taylor Rule) as a guide to its plans for removing monetary accommodation.

- My criticism is similar to Brunner and Meltzer's criticism of Fed in 1929-30.

On the Theoretical Problem

- Central banks have a lot of information about inflation.
- Not all of their information is *rulable*: how would we ever encode events of 8/09/07 into a rule?
- **Benefit of rule**: eliminates bias (due to time inconsistency and other factors).
- **Benefit of discretion**: central banks can offset non-rulable shocks.

Rule vs. discretion: which benefit is larger?

I answer this question for different objectives (mean-variance and minimax).

EMPIRICAL PROBLEM

Summary of Economic Projections

- FOMC gathers participants' projections on quarterly basis.
  - Summary of Economic Projections (SEP).
- Key: projections are based on *appropriate* monetary policy.
- Hence, beyond normal 1-2 yr lags, they can be viewed as participant's economic goals.

FOMC's Unemployment Rate Goals

Table 1: Median Fourth Quarter SEP Projections for UR

	Current	2 Years Ahead	3 Years Ahead	Long Run
2009	9.8	8.3	7.0	5.0
2010	9.5	8.0	7.1	5.3

FOMC's Inflation Goals

Table 2: Median Fourth Quarter SEP Projections for Inflation

	Current	2 Years Ahead	3 Years Ahead	Long Run
2009	-0.5	1.5	1.5	2.0
2010	1.3	1.4	1.5	2.0

Staff Forecast Based on Taylor Rule (1993)

Table 3: FOMC Staff's Projections

	2009 UR proj.	2009 core π proj.	2010 UR proj.	2010 core π proj.
2010	9.5	1.1	9.7	1.1
2011	8.2	1.0	9.0	1.0
2012	6.1	1.1	7.9	1.0
2013	4.9	1.4	7.1	1.2
2014	4.7	1.6	6.1	1.3
2015	NA	NA	5.2	1.5

Implications

- Taylor Rule-based projections implied slow recovery.
- FOMC goals closely track this slow recovery.
- FOMC reluctant to pursue more aggressive recovery.
  - through asset purchases (perhaps understandable?)
  - or through aggressive forward guidance

THEORETICAL PROBLEM

Basic Setup

- Central bank (CB) has possible inflation target bias.
  - time consistency or political economy
- CB has non-rulable information about inflation.
- Society cannot use pecuniary tools for incentives.

Analytical Framework

- Society faces a **delegation problem** (Holmstrom (1984)) with respect to CB.

- I use his basic formalism to address rules vs. discretion.

- Rule: monetary accommodation is pre-determined function of rulable information.

- Discretion: CB can choose any level of accommodation.

Results

- When is discretion superior to best possible rule?
- With mean-variance: if st. dev. of non-rulable shock $>$ bias.
- With minimax: if largest abs. value of non-rulable shock $>$ bias.
- I argue that, in past 20 years, FOMC has little pro-inflation bias.

CONCLUSIONS

- Paper argue, using theory and evidence, that:

  For FOMC, discretion is superior to rules.

- Congress shouldn't enshrine Taylor Rule as a reference rule.

- Instead Congress should:

  - Establish clear quantitative goals for FOMC.

  - Support existing Fed institutions that work to constrain pro-inflation bias.