

Monetary Policy Committees and Voting Behavior.

S. Eijffinger¹, R.Mahieu², L.Raes³

SUERF/BAFFI CAREFIN Centre Conference
Bocconi University

April 2016

¹CentER and EBC, Tilburg University; CEPR

²Tias Business School, Tilburg University

³CentER and EBC, Tilburg University

MPCs and voting

- Most central banks are governed by **committees** who decide (often vote) on policy.
- Fairly **few** make voting records public (e.g. BoE, Fed, Riksbank).
- But voting records may tell us a lot.

→ in academia: learn about preferences which feeds into discussion on governance and design

Is it a good idea to have regional representation (cfr Fed)?

Should one use a scheme of rotation?

Should we have different types of appointments e.g. internals-externals as in BoE

?

Does career background matter?

→ in financial press: classify doves and hawks (Financial Times, Bloomberg, Forbes, . . .)

- Dominant approach in academia: reaction function framework

- Here: Ideal-Point estimation → roll call analysis very popular and developed in quantitative political science. Few applications in the area of central banks (main exception: Hix, Hoyland and Vivyan 2010).

- Ideal Point Estimation: try to infer latent ideal points (preferred policies) from observed votes.
 - on a dove hawk dimension we place policy choices and ideal points (x_n)
 - Answer the question: "Assume policy makers only differ in their dovishness-hawkishness, how should we rank them to explain the observed votes?"

Spatial voting model

Basic model:

$$P(y_{nt} = 1) = \text{logit}^{-1}(\beta_t x_n - \alpha_t),$$

with non-informative priors on α_t , x_n , β_t .

→ logit model with everything unobserved:

y_{nt} : observed vote of committee member n at time t

α_t : vote-difficulty parameters or meeting specific intercepts (capture all factors relevant to vote decision)

β_t : discrimination parameters: makes model flexible → positive and large: x_n matter

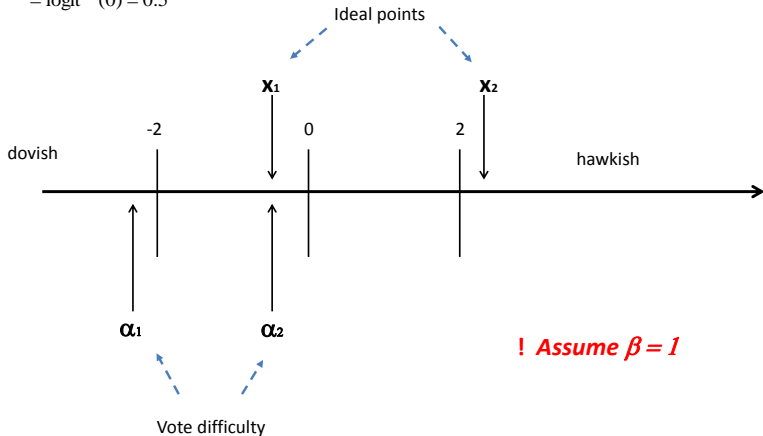
x_n : **ideal points**

Hierarchical extension:

$x_n \sim N(\gamma v_n, \sigma_x^2) \rightarrow v_n$ are ideal point predictors

If $x_1 = \alpha_2$,
then $\text{logit}^{-1}(x_1 - \alpha_2)$
 $= \text{logit}^{-1}(0) = 0.5$

If $x_1 > \alpha_1$,
then $\text{logit}^{-1}(x_1 - \alpha_1) > 0.5$



- Strength: Flexible and powerful methodology (see further);

Weakness: no link with theory

However an observer stated: "a lets look at the data without pre-conceptions paper"

- We rank MPC members on a single latent dimension

→ Some do not like this!

→ Reduce complex decision making process to points on a single latent dimension?

→ No, ideal points are a statistic, a summary and abstraction.

→ Model fits data *really well* (paper on BoE), little need for higher dimensions

Reminder! Research on central banks is in essence a range of case studies.
→ Each CB has unique features which warrants carefulness when generalizing

We have three papers (all ongoing):

- 1 Inferring hawks and doves from voting records
update of work by Hix et al.; focus on Bank of England
- 2 Estimating the preferences of central bankers: an analysis of four voting records
Focus on Poland, Czech Republik, Sweden, Hungary
- 3 Hawks and doves at the FOMC
Focus on FOMC + efforts to extend methodology

Results on the FOMC: Elements

- Data: **not** real votes, but **stated preferences** from transcripts
 - FOMC participants provide an explicit interest preference during FOMC meeting
 - Official voting record might be a bit less useful: e.g. under Greenspan a *“autocratic-collegial committee”* (Blinder 2009)
 - coded as decisions on 2 alternatives
 - sample: 1989-2007 (*will be extended*)
- 1 dimensional spatial voting model, static, hierarchical extension, Bayesian
- Focus on determinants of individual preferences:
 - career before FOMC
 - Board Governors vs. (Regional) Bank President
 - appointing US president

Some results

- Robust result:

Board Governors are on average more dovish than Bank Presidents

→ all things equal, we expect a Board Governor, confronted with two policy rates in a discussion, more likely to prefer the lower policy rate than a Bank President

- Career experience: no or little effect of previous jobs (NGO, financial industry, ...)

- US president effect: negligible

↔ literature

Why?

- 1) Watch out for data duplication.
- 2) Take uncertainty seriously.

Some results

1) No data duplication ($N \neq$ central bankers):

if we have 10 FOMC members who voted each 100 times, we still have only 10 ideal points. So we should not act as if we have 1000 latent preferences

2) Preferences are latent i.e. unobserved, so we are not certain and we take uncertainty into account

→ *Who is the most dovish?* becomes a probability statement

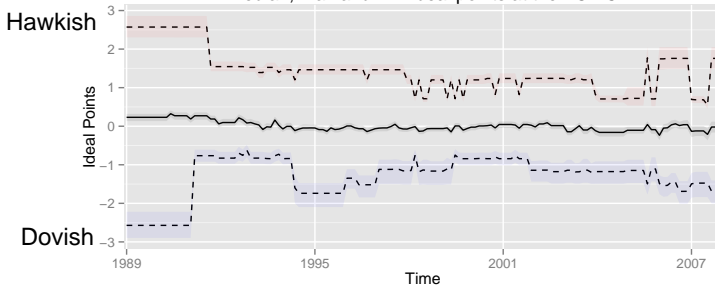
- FOMC board evolves over time (**high turnover**), but:

- median ideal point very stable → no influence due to political appointments, (pol.) business cycles

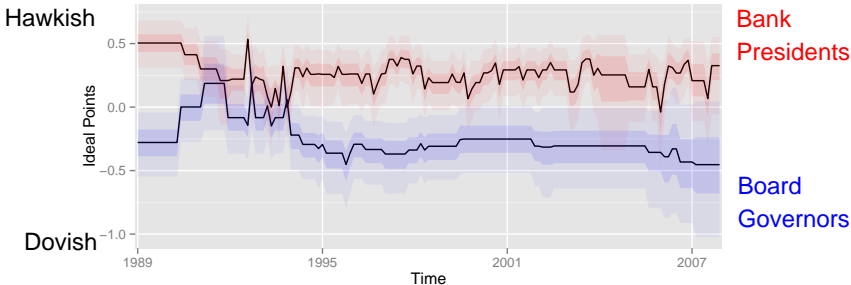
- median ideal points of Board members and Bank presidents varies over time!

→ balance each other

Median, max and min ideal points at the FOMC



Board Governors and Bank Presidents



Conclusion 1

- ideal point estimation may be useful for scaling FOMC members + presents better picture of **uncertainty** on ranks
- preferences cannot simply be explained by determinants like appointing president or career;
only robust divide is Board Governor vs. Bank President
- median ideal point of FOMC as a whole is stable, but variation of median Board Governor and median Bank President
- divergence of opinions (distance between most dovish and most hawkish members) varies substantially over time

Conclusion 2

- The vast majority of papers on MPC's and voting are case studies of the Bank of England and the FOMC
- Hard to draw strong lessons for other central banks.

Example: Jung and Latsos (2015) conclude that rotation is a good thing at the FOMC and draw lesson for EBC

→ reasonable idea, but based on $n = 1$!

→ ECB: 1 country = 1 vote (regardless of size); alternative rotation scheme; appointments are *less* centralized (e.g. 5 Board Governors for 12 FOMC members vs. 6 executive board members for 21 Governing Council members with voting rights), ...

→ Be careful with generalizing *lessons*.

Conclusion 3

- More openness needed e.g. publish records with a lag like transcripts at FOMC
- MPC's are sometimes *well designed* but often the result of political compromise (cfr. ECB) !

References



Blinder, Alan (2009)
Making Monetary Policy by Committee
International Finance



Eijffinger, Sylvester and Mahieu, Ronald and Raes, Louis (2013)
Estimating the preferences of central banks: an analysis of four voting records
CEPR Discussion Paper 9602



Eijffinger, Sylvester and Mahieu, Ronald and Raes, Louis (2013)
Inferring hawks and doves from voting records
CEPR Discussion Paper 9418



Eijffinger, Sylvester and Mahieu, Ronald and Raes, Louis (2015)
Hawks and doves at the FOMC
CEPR Discussion Paper 10442



Jung, Alexander and Latsos, Sophia (2015)
Do federal reserve bank presidents have a regional bias?
European Journal of Political Economy



Hix, Simon and Vivyan, Nick and Hoyland, Bjorn (2010)
From doves to hawks: A spatial analysis of voting in the monetary committee of the Bank of England
European Journal of Political Research