The Tempered Ordered Probit (TOP) model with an application to monetary policy

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July 2014: International Panel Data Conference; Tokyo

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  - is extremely flexible relative to more standard models
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- And so on...

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  - Governor tables a rate motion; members vote; majority rules; Governor has a casting vote in the event of a split decision

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- Let's have a look at the raw data...

The Repo-Rate

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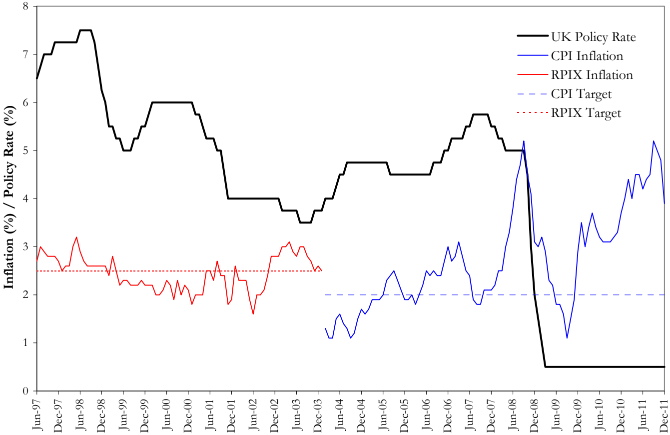

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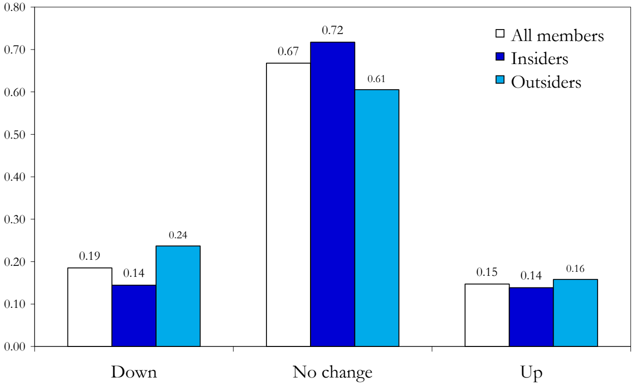

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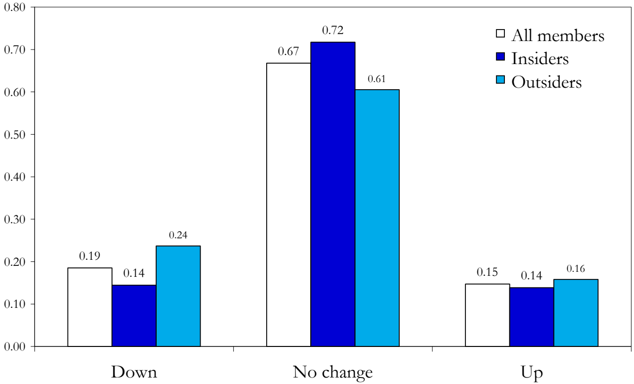

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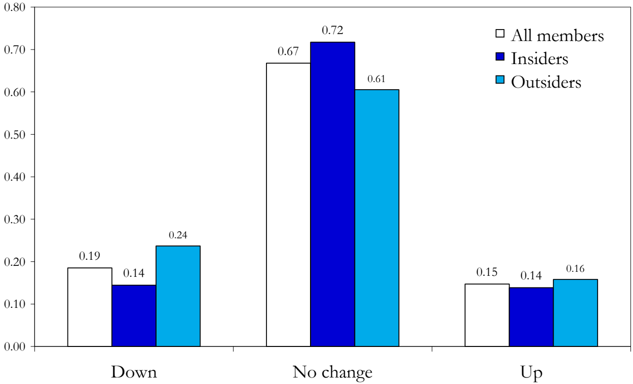

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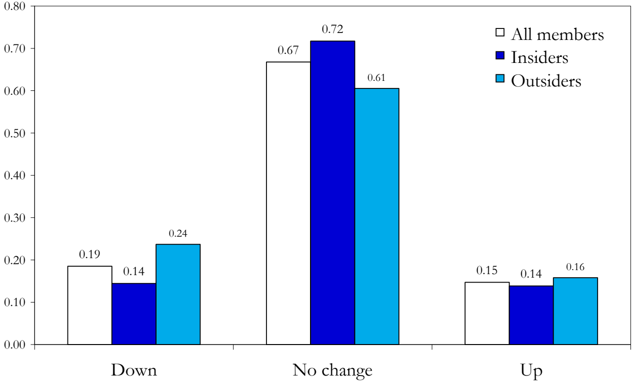

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- Some (raw) evidence of insiders and outsiders acting differently (*e.g.*, outsiders seem to have a bigger preference for tightening...)

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- Regime membership $(q = 0, q = 1)$ is unobserved and must be identified on data

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  - *Observationally equivalent no-change outcomes, can hence arise from two distinct sources*

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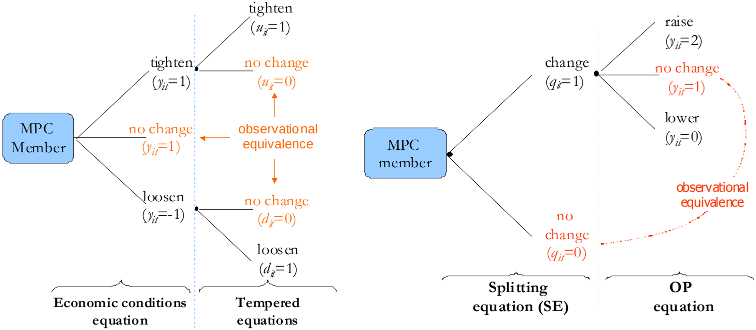
- 

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- $$\Pr\left(increase \,|up\ propensity\right) = \Phi\left(\mathbf{x}_s' \boldsymbol{\beta}_u\right)$$
- Is no requirement that $\boldsymbol{\beta}_d \equiv \boldsymbol{\beta}_u$; and good reasons to expect not...

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- So here, x_j can have *opposing signs*: a *tempering* effect in one direction and an *intensifying* effect in the other

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  - the implicit test is one of *symmetry* versus *asymmetry* in the inertia equations

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- And estimate using simulated ML

Results: Panel Effects and Economic Conditions Equation

	POP	*MIOP*	*TOP*	*PTOP*
$\pi_{Dev,t}$	0.195 *** (0.025)	0.588 *** (0.075)	0.527 *** (0.067)	0.816 *** (0.077)
GAP_t	0.055 (0.052)	0.139 *** (0.087)	0.260 ** (0.103)	0.145 (0.120)
μ_0	−0.915*** (0.041)	−0.626 *** (0.07589)	−0.550*** (0.078)	−0.555*** (0.119)
μ_1	1.103 *** (0.046)	1.012 *** (0.083)	0.667 *** (0.153)	0.682 *** (0.199)
σ^2_π	–	–	–	0.408 *** (0.053)
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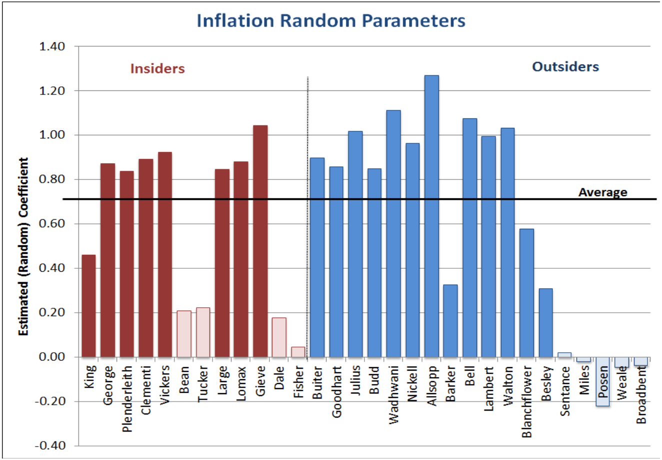
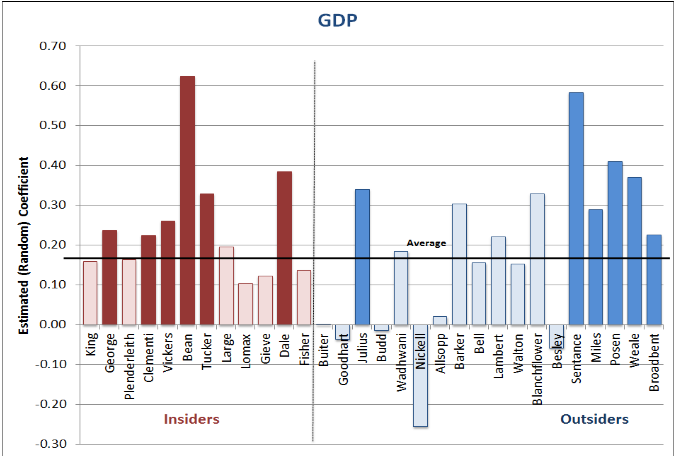
- So, recovered RP estimates can tell an interesting story!

Member Specific Parameters: Inflation



Member Specific Parameters: Growth



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2. achieves *inflation* by the introduction of "tempering equations"
3. more flexible than existing *inflation* models (*e.g.*, MIOP)

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- The model provides a simple specification test for the increasingly popular MIOP models

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- THE END! :-) QUESTIONS/COMMENTS/SUGGESTIONS (NICE ONES!) VERY WELCOME!