Discussion of

“Performance of Inflation Targeting Based on Constant Interest Rate Projections” by Seppo Honkapohja and Kaushik Mitra

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Not an easy paper to discuss

- Exercise is standard
  - thanks to Seppo, Kaushik and co-authors

- Paper has a “history”
  - discussed many times at conferences since Eltville (2003)
  - forthcoming *Journal of Economic Dynamics and Control*
Two inter-related questions

• Where does optimality fit in?

• Is it reasonable to believe that central banks follow CIR policies?
Summary of paper

<table>
<thead>
<tr>
<th>CIR_{UK} policy</th>
<th>CIR_{S} policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>choose ( i_t )</td>
<td>choose ( i_t )</td>
</tr>
<tr>
<td>s.t. ( E_t \pi_{t+h} = \pi^* )</td>
<td>s.t. ( i_t - i_{t-1} = \omega (E_t \pi_{t+h}(i_{t-1}) - \pi^*) )</td>
</tr>
<tr>
<td>( E_t i_{t+j} = i_t ) ( 0 \leq j \leq h-1 )</td>
<td>( E_t i_{t+j} = i_{t-1} ) ( 0 \leq j \leq h-1 )</td>
</tr>
</tbody>
</table>

- Both policies have poor determinancy and e-stability properties
- \textbf{CIR}_{UK} worse than \textbf{CIR}_{S}
An optimal CIRₜ rule: \( i_t - i_{t-1} = \omega \left( E_t \pi_{t+h}(i_{t-1}) - \pi^* \right) \)

- Optimal CIRₜ nowhere near e-stability/indeterminacy problems

Optimal \( \omega \) is about 0.17
Critical \( \omega \) for e-stability is 3.39

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Other monetary policy rules

<table>
<thead>
<tr>
<th>Rule</th>
<th>Equation</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIR(_S)</td>
<td>(i_t - i_{t-1} = 0.17(\mathbb{E}<em>t \pi</em>{t+h} - \pi^*))</td>
<td>5.99</td>
</tr>
<tr>
<td>Taylor 1</td>
<td>(i_t = 0.5 x_t + 1.5 \pi_t)</td>
<td>2.61</td>
</tr>
<tr>
<td>Taylor 2</td>
<td>(i_t - i_{t-1} = 0.5 x_t + 1.5 \pi_t)</td>
<td>2.33</td>
</tr>
</tbody>
</table>

- CIR\(_S\) is a very sub-optimal rule
- Only a nutcase would choose CIR\(_S\) rule!
• Does not appear that either has indeterminacy or e-stability problems
England vs Sweden

• Central banking since independence
  - 81 England wins
  - 18 Sweden wins
  - 5 draws

• Football
  - 6 England wins
  - 6 Sweden wins
  - 8 draws

• Both countries similarly successful
Concluding (rhetorical) questions

• Which should we worry about most, optimality or indeterminacy/e-stability?

• If Bank of England and Sveriges Riksbank have been following CIR policies, how come they have been so successful in controlling inflation?