

# Discussion of Evans and Honkapohja, “Robust Learning Stability.”

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<sup>1</sup>Views expressed are those of the author and do not necessarily reflect official positions of the FOMC or the Federal Reserve System.

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  - ... so long as small expectational deviations from RE dissipate, instead of accumulating.
- That condition is known as *expectational stability*.





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  - decreasing gain in the learning rule.
- *Comforting.*



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  - Keep policymaker information in line with reality.
- In particular, contemporaneous values of output and inflation are not known when policy decisions are made.



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  - ... but most produce expectational instability in this setting.
- Policymakers following these recommended approaches in this environment would be surprised to find that the economy does not coordinate on the intended equilibrium.
- To obtain expectational stability, use the expectations-based rules of Evans-Honkapohja (2003, 2006).

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- Another analogy: default punishment in models with endogenous debt constraints.



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  - Consider the breakdown of Bretton Woods.
  - And maybe we should worry about Sweden, as we will see below.



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- Instability requires the combination of operational rules with constant gain learning.



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- Worrisome.
- The expectations-based approach of Evans and Honkapohja solves this problem and provides robust expectational stability.



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- Operational versions can be associated with instability under learning for reasonable gain parameters.
- Worrisome for Sweden? Figure 2?
- There is nothing optimal about instability.

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- Avoids committing to a particular recursive algorithm to describe learning.
- But, expectational stability still plays a role in that analysis.



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- *Stability still an issue.*



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- I appreciate the attention to stability issues, which I think are insufficiently analyzed in macroeconomics.
- Instability can produce the “big ticket losses” that policymakers really worry about.