

Raf questions:

- section 2, you use a Fisherian model to introduce the impact of a PLM on the determinacy properties. Would it be possible to formulate the same arguments also in a standard NKPC setting? Did you retain the Fisherian setup because there is only one parameter involved, or also because of the link with the previous literature?

why fisherian model for the initial setup:

-Davig & Leeper start building on this setup, it seems to be the benchmark for MS-DSGE models.

-Also one-parameter setup is always nice and easy for illustration purposes. -They also had a NKPC setup, which can perhaps be linked to our framework.

- section 3.3, you do not seem to refer to the possibility of E-stability for the ZLB regime with simple learning beliefs (in contrast with the Evans HM result)?

why monte carlo experiment for MSV learning, but not for VAR learning?

-only for brevity, we can also apply a similar experiment to VAR learning (in fact the code for this is ready in any case)

- The link between the first sessions (2 and 3) and the estimation exercise in sessions (5 and 6) seems absent. What about the E-stability properties of the estimated models?

why not check for e-stability of the estimated models

-1) E-stability conditions ensure that models will lead to stable dynamics under reasonable conditions. So these conditions are mostly there to justify we don't get fully explosive dynamics.

-2) If we look at the e-stability conditions on p.8 and p.9, they involve the vectors/matrices of RPE (small letters). We haven't solved these yet, so as of yet we cannot check the E-stability conditions explicitly.

-Instead, this calls for another small section after the estimation, where we simulate the models under the estimated parameter values, and hope for the best.

- From the irfs it looks as if the learning of the new regime goes very quick? I seem to remember that this transition took more time in your initial exercises. It was a nice point to compare the change in the irfs under RE (normal versus ZLB regime) and the AL dynamics that gradually moved in the same direction. I was missing that argument a little bit (or missed it because I read too quick?).

why impulse responses move too quickly rather than gradual

-did we ever have gradual movement? I think we were hoping for it, but I am not sure we ever actually got it.

-in any case, one thing we can observe is the gradual movement in expectations, but that graduality does not seem to be reflected in IRFs.

additions I have in mind:

-one more PLM for Smets-Wouters, with small forecasting (AR(1) or AR(2)) that includes interest rates—> so we can see how the coefficients move. Because I noticed currently we can't do this:

-In ar(1) interest rates simply do not matter for PLM, and in MSV the PLM is too large and results in a too small coefficient. So Ideally we add a middle ground that combines small forecasting + interest rates.

-Edward Herbst has a paper on something similar: main difference is agents also learn about the regime. (they also analyze forward guidance). they argue that **SMC** is better than **MCMC**

for these kinds of models.
-how would we introduce forward guidance into this framework?