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Estimating the effects of forward guidance in rational expectations models*

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Abstract

Simulations of forward guidance in rational expectations models should be assessed using the "modest policy interventions" framework introduced by Eric Leeper and Tao Zha. That is, the estimated effects of a policy intervention should be considered reliable only if that intervention is unlikely to trigger a revision in private sector beliefs about the way that monetary policy will be conducted. I show how to constrain simulations of forward guidance to ensure that they are regarded as modest policy interventions and illustrate the technique using a medium-scale DSGE model estimated on US data. I find that many experiments that generate the large responses of macroeconomic variables deemed implausible by many economists – the so-called "forward guidance puzzle" – are *not* modest policy interventions. Those experiments should therefore be treated with caution, since they may prompt agents to believe that there has been a change in the monetary policy regime that is not accounted for within the model. More reliable results can be obtained by constraining the experiment to be a modest policy intervention. In the cases I study, the quantitative effects on macroeconomic variables are more plausible when this constraint is imposed.

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