Forward Guidance with Bayesian Learning and Estimation

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Abstract

We estimate a New Keynesian model in which the private sector has incomplete information about a central bank’s reaction function and must infer it based on economic outcomes. A central bank’s reaction function can change across regimes and we document a systematic change in U.S. policymakers’ reaction function during the 2009-2016 period in which the federal funds rate was at the effective lower bound. This regime is characterized by being more responsive to economic slack and implies that policymakers sought to keep the policy rate at the ZLB longer than would the case by the pre-existing reaction function; hence, we call this the forward guidance regime. We use the model to assess the impact of forward guidance on the macroeconomy and to evaluate the role of imperfect information and learning in limiting its effectiveness.

JEL classification: C11, C32, E32, E52

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