Managing Non-Rational Expectations: A "Monetary Policy" Example

Ran Spiegler

March, 2016

Abstract

I study a stylized static model of optimal monetary policy in the tradition of Barro and Gordon (1983), which relaxes the conventional assumption that the private sector has rational expectations. Building on the literature on Bayesian networks, I assume that the private sector forms its inflation forecast by fitting a misspecified causal model - formalized as a direct acyclic graph (DAG) over relevant variables - to the objective steady-state distribution. I characterize the central bank's ex-ante optimal contingent policy for various private- sector DAGs. The classical impossibility of using monetary policy to systematically enhance real activity persists for a large class of DAGs. In these cases, the central bank's optimal policy may display excessive rigidity relative to the rational-expectations benchmark.