Oil Price Shocks and Aggregate Macroeconomic Dynamics: The Role of Monetary Policy

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A recent paper by Bernanke, Gertler and Watson (1997) suggests that monetary policy could be used to eliminate any recessionary consequences to an oil price shock. This paper challenges that conclusion on two grounds.

First, we question the feasibility of the analyzed counterfactual scenario. BGW simulate a counter-factual experiment generating a sequence of monetary shocks in a structural VAR such that the Fed funds rate is unchanged for *k* periods after an oil price shock. The implied change in the variables is interpreted as the effect of an oil price shock on the macroeconomy, holding the Fed funds rate constant. Based on the hypothesized distribution for the impulse response coefficients we propose a method to quantify whether the simulated paths are consistent with the historical values. We show that this scenario implies choosing a sequence of monetary shocks that is outside the confidence interval necessary for the shock to be interpreted as surprises to the agents. Therefore, the parameters of the structural VAR would not remain unchanged and the simulation results would be bound to the Lucas critique.

Second, we point out that BGW's results are not robust to changes in the lag length. That is, given that the lag length is uncertain, the reported standard errors underscore the degree of uncertainty in the results. We discuss the effect of modifications to the lag length in structural VARs selected under different information criteria. Finally we show that, under a different lag length specification, even the aggressive Federal Reserve policies would not have succeeded in averting a downturn.