Structural Inference and the Lucas Critique *

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First draft – January 2000 This draft – March 2001

Abstract

We develop a structural model that aims at characterizing a set of restrictions allowing for a statistical evaluation of the effect of changes in monetary policy rules on aggregate dynamics at business cycle frequency. Standard econometric tools are first used to reveal and estimate changes in monetary policy rules over two sub–samples. We then test the ability of our model to match a set of moments summarizing the distribution of the data over the two sub–samples. We find that — holding the deep parameters of the model (preferences and technology) constant — monetary policy parameters adjust to match the data, therefore illustrating the empirical relevance of the Lucas critique.

Keywords: Lucas critique, monetary policy rules, method of moments, stability tests.

JEL classification: C51, C52, E32, E52

^{*}We would like to thank D. Andolfatto, P. Beaudry, J.P. Benassy, A. Chéron, R. Farmer, J.P. Florens, S. Grégoir, P.Y. Hénin, E. Leeper, D. Lopez-Salido, P. N'Diaye, F. Portier and K. Wallis as well as the other participants to the conference "The Econometrics of Policy Evaluation" (Paris, January 10–12, 2000), T2M conference (Nanterre, 2000), the 2nd Toulouse seminar on Macroeconomics (Toulouse, september 2000) and the Econometric Workshop (Toulouse, January 2001) for helpful comments on a previous version. We are also thankful to two anonymous referees.

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