

SPURIOUS PHILLIPS CURVES AND THE LONG-RUN RELATIONSHIP BETWEEN INFLATION AND THE MARKUP IN THE UNITED STATES^{*}

Bill Russell[#] Anindya Banerjee[†] Issam Malki^{*} Natalia Ponomareva[°]

11 January 2010

ABSTRACT

Phillips curves have traditionally been estimated without due attention to the underlying time series properties of the data. In particular, the possibility that inflation may have breaks in mean has been ignored. A simulation study and an empirical example based on United States data show that the standard estimates may be seriously flawed by such an omission leading to spuriously upwardly biased estimates of the dynamic inflation terms of the Phillips curve. We suggest a method to account for the breaks in mean and obtain meaningful and unbiased estimates of the short- and long-run Phillips curves in the United States.

Keywords: Phillips curve, inflation, panel data, non-stationary data

JEL Classification: C22, C23, E31

^{*} # Corresponding author: Economic Studies, University of Dundee, Dundee DD1 4HN, United Kingdom. +44 1382 385165 (work phone), +44 1382 384691 (fax). Email brussell@brolga.net. [†] Department of Economics, Birmingham Business School, University of Birmingham, Edgbaston, Birmingham B15 2TT. Email a.banerjee@bham.ac.uk. ^{*} Department of Economics, University of Bath. [°] Department of Economics, Macquarie University. We would like to thank participants of University of Western Australia and Australian National University seminars for their helpful comments and Pierre Perron for making available the Bai-Perron programme on his personal internet site. The corresponding author also acknowledges the generous support of the Economics Department at Macquarie University where this paper was completed while he was a visiting economics fellow. All data are available at www.BillRussell.info.