New panel tests to assess inflation persistence

Roy Cerqueti^a, Mauro Costantini^{*b}, and Luciano Gutierrez^c

^a Department of Economics and Financial Institutions, University of Macerata

^b Department of Economics, University of Vienna

^c Department of Agricultural Economics, University of Sassari

Abstract

In this paper we propose new panel tests to detect changes in persistence. The test statistics are used to test the null hypothesis of stationarity against the alternative of a change in persistence from I(0) to I(1), from I(1) to I(0), and in an unknown direction. The limiting distributions of the test under the hypothesis of cross-sectional independence are derived. Cross-sectional dependence is also considered. The tests are applied to the inflation rates of 19 OECD countries over the period 1972-2008. Evidence of a change in persistence from I(1) to I(0) is found for a set of these countries.

Keywords: Persistence, Stationarity, Panel data.

JEL Classification: C12, C23.

^{*} Correspondence to: Mauro Costantini, Department of Economics, University of Vienna, BWZ, Bruenner Strasse 72 A-1210 Vienna, AUSTRIA. Phone: (+43-1) 4277-37478. Fax: (+43-1) 4277-37498. E-mail: mauro.costantini@univie.ac.at