

Panel Cointegration Testing in the Presence of Linear Time Trends

Uwe Hassler and Mehdi Hosseinkouchack
Goethe University Frankfurt

ABSTRACT

We consider a class of panel test including tests for the null hypothesis of no cointegration as well as cointegration. All tests under investigation rely on single-equations estimated by ordinary least squares, and they may be residual-based or not. We focus on test statistics computed from regressions with intercept only (i.e. without detrending) while at least one of the regressors (integrated of order 1) is dominated by a linear time trend. In such a setting, often encountered in practice, the limiting distributions and critical values provided for and applied with the situation „with intercept only“ are not correct. It is demonstrated that their usage results in size distortions growing with the panel size n . Moreover, we show which are the appropriate distributions, and how correct critical value are available from the literature.