



ECONOMETRIC RESEARCH SEMINAR

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- SZVI
Institut für Höhere Studien
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"Likelihood based testing for no fractional cointegration"

We consider two likelihood ratio tests, so-called maximum eigenvalue and trace tests, for the null of no cointegration when fractional cointegration is allowed under the alternative, which is a first step to generalize the so-called Johansen's procedure to the fractional cointegration case. The standard cointegration analysis only considers the assumption that deviations from equilibrium can be integrated of order zero, which is very restrictive in many cases and may imply an important loss of power in the fractional case. We consider the alternative hypotheses with equilibrium deviations that can be mean reverting with order of integration possibly greater than zero. Moreover, the degree of fractional cointegration is not assumed to be known, and the asymptotic null distribution of both tests is found when considering an interval of possible values. The power of the proposed tests under fractional alternatives and size accuracy provided by the asymptotic distribution infinite samples are investigated.