Abstract of the seminar talk of May 23, 2007

COINTEGRATION WITH INFINITE VARIANCE NOISE

Keith Knight

University of Toronto

In recent years, a number of authors (e.g. Caner, 1998; Paulauskas and Rachev, 1998) have consider the asymptotic properties of classical estimation procedures for cointegrated processes driven by infinite variance noise. However, classical procedures, typically based on least squares estimation, do not fully exploit the interesting dynamics of infinite variance processes and hence are inefficient. In this paper, we consider M-estimation for cointegrated processes in a vector autoregressive model driven by noise in the domain of attraction of both multivariate and operator stable distributions, and develop the asymptotic theory for these estimators.