Abstract

We consider the problem of estimation and testing of vector error correction models with non-linear error correction when the model is in fact linear. A general class of error-correction models are introduced, where certain parameters of the non-linear component vanish under the null of linear error correction. This leads to a non-standard test for the null of linear error-correction. We solve this problem by using sup tests. We derive the asymptotics of estimator and test statistics under the null. The asymptotic distributions prove to be non-standard due to the impact of the estimated cointegration relations. This makes implementation of the test statistic difficult, but and a bootstrap procedure is proposed and shown to be consistent.