

Lee, Sangyeol (Seoul National University, Korea)

Test for Parameter Change Based on the Cusum Test in Time Series Models

Abstract: We consider the problem of testing for a parameter change based on the cusum test in time series models. Although the test procedure is well-established for the mean and variance in time series models, a general parameter case has not been discussed in the literature. Therefore, here we develop a cusum test for parameter change in a more general framework. As an example, we consider the change of the parameters in RCA(1) models, unstable models and GARCH models and that of the autocovariances of a linear process. Also, we consider the cusum test based on the estimator minimizing density-based divergence measures.