

Seminario Aleatorio

Sesión 286

Unit root testing in ARMA models: A likelihood ratio approach

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Resumen

This paper proposes a Likelihood Ratio test for a unit root (LR) with a local-to-unity autoregressive parameter embedded in ARMA(1; 1) models. By dealing explicitly with dependence in a time series through the Moving Average, as opposed to the long autorregresive lag approximation, the test shows gains in power and has good small-sample properties. The asymptotic distribution of the test is shown to be independent of the short-run parameters. The Monte Carlo experiments show that the LR test has higher power than the Augmented Dickey Fuller test for several sample sizes and true values of the Moving Average parameter. The exception is the case when this parameter is very close to -1 with a considerably small sample size.

**Viernes 29 de enero de 2016, 13:00 hrs.
Aula B-3, Plantel Río Hondo**

El Seminario Aleatorio está destinado tanto a profesores como a estudiantes, por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.

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