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Unit Root Tests - Thirty Years and Ticking!

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Refreshments: 10:00 a.m.

Abstract

It has been three decades since the seminal work of Dickey and Fuller (1979) on testing for unit roots in time series data. There have been a number of papers published in this area. [If you Google "Unit root tests" you would get over 330,000 results, with the most recently published work being within the last few months.] These tests also formed a basis of cointegration models and integrated GARCH models. In this talk, some of the major unit root test criteria and their impact in econometrics and other fields will be reviewed. Size, power and robustness to model misspecification of various unit root test criteria will be discussed. Tests for trend stationarity versus difference stationary models will be discussed briefly. Current work on unit root test criteria on random coefficient models and seasonal series will also be discussed. Examples of unit root time series and future directions in unit root hypothesis testing will be presented.

To request an interpretor or other accompdations for people with disabilities, please call the Department of Statistics and Probability at 517-355-9589.