

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor Richard J. SMITH

Faculty of Economics Gonville and Caius College
University of Cambridge
U.K.

will give a talk

entitled

GEL STATISTICS UNDER WEAK IDENTIFICATION

Abstract

The central concern of this talk is the provision of asymptotically pivotal test statistics in a moment condition framework whose properties are robust to the strength or weakness of identification and which possess good finite sample size and power properties. The talk proposes Pearson-type test statistics based on implied probabilities obtained from GEL methods are proposed for testing simple hypotheses involving the unknown parameter vector in moment condition time series models. Like the test statistics suggested in Guggenberger and Smith (2008), these statistics utilise smoothed versions of the moment indicators. The empirical null rejection probabilities of the corresponding tests are not be affected greatly by the strength or otherwise of identification. More precisely, we show that the statistics are asymptotically chi square under both classical asymptotic theory and weak instrument asymptotics of Stock and Wright (2000). We also modify the statistics suggested in Guggenberger and Smith (2008) for a general form of kernel smoothing function and suggest other statistics appropriate for the weakly identified time series context. A comprehensive Monte Carlo study indicates that a number of the tests proposed here represent very competitive choices in comparison with existing statistics suggested elsewhere in the literature.

on

Thursday, January 27, 2011

4:30 p.m. – 5:30 p.m.

at

**Room 524, Meng Wah Complex
(behind the Chong Yuet Ming Amenities Centre)**

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 2859 2466 for parking arrangement.

All interested are welcome