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INSTITUT SAINS MATEMATIK

UNIVERSITI MALAYA

SIRI KOLOKIUM

Tajuk: Shrinkage preliminary test estimator based on Wald, likelihood ratio and Lagrange multiplier tests for multiple regression model*

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Masa: 10:00 am – 11:00 am

Abstract

In this talk we introduce the Wald (W), likelihood ratio (LR) and Lagrange multiplier (LM) tests and use them in the definition of the shrinkage preliminary test estimator (SPTE) of the coefficients of multiple linear regression model by using sample and non-sample prior information as well as a coefficient of distrust. The quadratic biases and relative efficiencies of the SPTEs relative to the OLSE are analysed. The analyses reveal that under the three original tests there is a great deal of conflict among the properties of the SPTEs. The use of modified tests significantly reduces the conflict, and the use of the size corrected tests almost eliminates it.

SEMUA DIJEMPUT HADIR

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*Joint work with Zahirul Hoque, Centre for Dynamic Modelling, University of Newcastle, Australia.