Rank Tests and Regression Rank Scores Tests in Measurement Error Models

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Abstract

The rank and regression rank score tests of linear hypothesis in the linear regression model are modified for measurement error models. In some situations the modified tests are still distribution free; their asymptotic relative efficiencies with respect to tests in model without errors are evaluated. The power of the tests is illustrated on the simulated data.

Key Words: Rank test of linear hypothesis, regression rank score test of linear subhypothesis, measurement error

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