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Asymptotic properties of the LSE in a regression model with long-memory stationary errors.
(English) Zbl 0728.62085

Summary: We consider asymptotic properties of the least squares estimators (LSE) in a regression model with long-memory stationary errors. First we derive a necessary and sufficient condition that the LSE be asymptotically efficient relative to the best linear unbiased estimator (BLUE). Then we derive the asymptotic distribution of the LSE under a condition on the higher-order cumulants of the white-noise process of the errors.

MSC:

62M10 Time series, auto-correlation, regression, etc. in statistics (GARCH)
62F12 Asymptotic properties of parametric estimators
62J05 Linear regression; mixed models
62E20 Asymptotic distribution theory in statistics

Keywords:
asymptotic efficiency; least squares estimators; long-memory stationary errors; best linear unbiased estimator; higher-order cumulants; white-noise process

Full Text: DOI