Diebold, Francis X.

Exact maximum-likelihood estimation of autoregressive models via the Kalman filter. (English) Zbl 1328.62542

Econ. Lett. 22, No. 2-3, 197-201 (1986).

Summary: The pth order autoregression is studied in state-space form, and a closed-form analytic expression is obtained for the unconditional covariance matrix of the initial state vector. It is shown that this covariance matrix depends only on the first p autocovariances, which makes exact maximum-likelihood estimation via the Kalman filter a straightforward task.

MSC:

62M20 Inference from stochastic processes and prediction
62M10 Time series, auto-correlation, regression, etc. in statistics (GARCH)

Software:

AS 154

Full Text: DOI

References:

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