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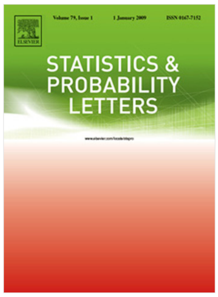

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A power comparison between autocorrelation based tests

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Abstract: In this paper we provide an asymptotic theoretical power comparison in the Bahadur sense, between the portmanteau and Breusch-Godfrey Lagrange Multiplier (LM) tests for the goodness-of-fit checking of vector autoregressive (VAR) models. We also aim to give some theoretical explanations on simulation results obtained in the literature, and suggest some guidelines on the choice of the number of autocorrelations in the test statistics. The merits and the drawbacks of the studied tests are illustrated using Monte Carlo experiments.

Keywords: VAR model; VECM model; Cointegration; Residual autocorrelations; Portmanteau tests, Lagrange Multiplier tests.

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