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ON THE BOOTSTRAPPING HETEROSCEDASTIC REGRESSION MODELS

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Abstract: The distributions of deviations of point estimators for parameters of interest are essential in the evaluation of the efficiency of point estimators. The bootstrap method suggested by B. Efron is one of the main methods directed at solving the problem of producing distributions which mimic the unobserved distributions of deviations.

The main object of this article is to study the asymptotic validity of the bootstrap in the context of heteroscedastic regression models, using the central limit resampling theorem. In the case of one-parameter linear regression, theoretical results are illustrated by an example with simulated statistical data.

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