Analysing the Tobit Model under Inverse-Scale Skew Normal Settings

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Abstract

The Tobit model is a specific censored regression model that the continuous component of data (right tailed) is assumed to be normally distributed. In this talk we assume that the underlying distribution is skewed, called the inverse scale skew normal distribution. The maximum likelihood estimators of model parameters with their asymptotic properties are derived. For illustration of our results, a simulation study for the Inverse scale skew normal Tobit regression model is discussed.