Estimation of linear regression model with skew normal errors

By

Baokun Li and Tonghui Wang

Southwest Finance and Economic University and New Mexico State University

Abstract   For simple linear regression the error terms are usually assumed to be independent and identically distributed as N(0,   ). In real applications, the errors seldom follow a normal distribution due to various reasons and a skew normal could be a good candidate for its alternative. In this talk, the quasi maximum likelihood estimation of the parameter is discussed for the linear regression model under skew normal settings. Also the asymptotic normality and consistency of the estimator are derived, and simulation result is included for illustration of the method.