

Abstract

This study aimed at attesting whether the application of different distribution assumptions of the error term has any effects on the efficiency score through the application of the National Panel Survey data from Tanzania. The study considered a half-normal and exponential distribution assumption. The results for the stochastic frontier were estimated and their efficiency scores support the views that indeed different distribution assumptions have different effects on the level of efficiency score. In both datasets, the exponential distribution assumption is showing a much higher level of mean efficiency score. The study recommends the need to specify a distribution assumption that should be considered during the estimation of the efficiency scores.

Keywords: Cobb Douglass, Exponential, Distribution assumption, Normal, Stochastic