On Sample Size in Using Central Limit Theorem
for Gamma Distribution

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Abstract

A general criterion in using the central limit theorem is based on the sample size $n \geq 30$, no matter what the population is. Such only one generalized criterion may not be suitable for various shapes of probability distributions. This study is to check gamma distribution, one of asymmetric continuous distributions, how fit that criterion by computer simulation techniques, and finds out the least required sample sizes that satisfy the central limit theorem under different parameters of the gamma distribution.

Keywords: Central Limit Theorem, Sample Size, Sample Mean, Gamma Distribution, Shapiro-Wilk W Test, Normality Test.