

Cut-off sampling for log-normal distribution

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Cut-off sampling has been widely used for business survey which has generally a right skewed population with a heavy tail. For modified cut-off sampling, Hidroglou (1987) suggested a method of cut-off point determination which separates take-all stratum and take-some stratum. In this paper we suggest a new cut-off point determination method with a given total sample size n where the underline distribution follows a log-normal distribution usually used as a population distribution for business survey. Small Monte-Carlo simulation studies are performed to confirm the theoretical results.

Key Words : Truncated log-normal distribution, cut-off point, k-th moments