

APPLICATION OF STRATIFIED SAMPLING IN HIGHLY SKEWED ACCOUNTING POPULATION

M. A. MALIK and M. ALEEM

Department of Statistics, Islamia University, Bahawalpur, Pakistan

AND

S. H. SHAH

Department of Statistics, Gomal University, D. I. Khan.

Abstract

This paper has been developed to use stratified sampling technique as the most appropriate tool to cope with a highly skewed populations of accounts without any loss of accuracy.

Introduction

In view of the discussion in [1] a stratified sampling has been chosen as the best available sampling plan for detecting the maximum possible errors in accounting populations. In this article the fictitious data has been used to illustrate the two classical methods of obtaining a stratified sample from a population of accounts.

The first method described would be used where the population under review was small enough (in numbers) for the auditor to arrange it in order and thereby obtain the number of items in each stratum. The second method would be used where the population was too numerous to allow the auditor to arrange the items in order and number them.

Creation of the fictitious exponential population

The continuous random variable y is said to have an exponen-