

Basic Notation in DAD

In this following table, we present the basic notations used in the user manual of DAD.

Symbol	Indication
y	the variable of interest.
i	Observation number
y_i	the value of the variable of interest for observation i
w	the Sampling Weight.
w_i	the Sampling Weight for observation i.
s	the size variable.
s_i	the size of observation i (for example the size of household i).
sw_i	$w_i * s_i$
k	the group variable.
k_i	the group of observation i.
c	The selected group variable
sw_i^k	sw_i^k=sw_i if k_i = c, and sw_i^k=0 otherwise.
n	Sample size

Example: The estimated mean of group k, $\hat{\mu}(k)$, is then estimated as:

$$\hat{\mu}(k) = \frac{\sum_{i=1}^N sw_i^k y_i}{\sum_{i=1}^N sw_i^k}$$