

Variance estimation has become a priority as more and more Commission Regulations require that the quality of the statistics be assessed. Sampling variance is one of the key indicators of quality in sample surveys and estimation. Sampling variance helps the user to draw better conclusions about the statistics produced, and it is also important information for the design and estimation phases of surveys.

However, due to the complexity of the methods used for the design and the analysis of the survey, like the sampling design, weighting and the type of estimators involved, the calculations are not straightforward. The literature on variance estimation is rich; however, no clear guidelines exist. This is mainly because all the methods compete, due to the existence of different simplifications or approximations.

Because of the necessity to offer solutions to the methodological problems encountered in the very specific field of variance estimation among the members of the European statistical system (ESS) a Task Force was set up by the Eurostat Working Group on the Assessment of Quality. The Task Force, composed of specialists from European national institutes, met four times and discussed solutions to many of the methodological problems encountered for sample surveys in the ESS. The meeting documents and the final report of the Task Force are available on the CIRCA interest group 'Quality in Statistics' (<http://forum.europa.eu.int/Public/irc/dsis/Home/main>).

Custodian: Eurostat

Knowledgebase on Economic Statistics - Methods and Country Practices
<http://unstats.un.org/unsd/EconStatKB/KnowledgebaseArticle10362.aspx>