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Enhancing statistical culture – The potential role of Statistical Societies

Topic 5 – Who uses statistics, what do they need and how should we engage with them?

Keywords: Statistical principles, Statistical Societies, public trust in official statistics

Introduction

In the context of European statistics, the term 'statistical culture' stands for the way statistical information is produced, made available to users and perceived by stakeholders and its underlying environment.

It is crucial for the reputation of European statistics to reach a high level of 'statistical culture'. At EU level, European statistics have become increasingly important for the development, implementation, monitoring and evaluation of EU policies but also for operational purposes.

As a consequence, the European Statistical System is to a high degree governed by legal provisions. The legal framework includes a diversity of principles aiming at a high 'statistical culture'. The European Union is quite outstanding in the degree to which its policies are based on statistics.

But European statistics should meet the requirements of other stakeholders, also. Seen from the broader perspective 'statistical culture' needs to include aspects which are at present not covered by EU legislation. In addition to identifying additional criteria for 'statistical culture' this presentation will be devoted to potential contributions of Statistical Societies in enhancing 'statistical culture'.

Methods / Problem statement

The development, production and dissemination of European statistics is governed by the statistical principles as defined in Article 2 of Regulation (EC) No 223/2009 on European statistics namely professional independence, impartiality, objectivity, reliability, statistical confidentiality and cost effectiveness.

The statistical principles set out in Article 2 are further elaborated in the European Code of Practice, consistent with the Fundamental Principles of Official Statistics adopted by the United Nations ECE on 15 April 1992 and by the United Nations Statistical Commission on 14 April 1994.

The existence of detailed legal provisions and agreed standards must be seen as a necessary but not sufficient criterion; compliance with them has to be monitored. For this purpose, two rounds of peer reviews have been carried out by Eurostat and a European Statistical Governance Advisory Board (ESGAB) has been established. The European Statistical System needs a specific form of governance, reliable and relevant statistics are an essential condition for good governance and sound decision-making in democratic societies.

The progress made in improving the governance clearly contributes to more 'statistical culture'. Nevertheless, whether the principles as laid down in the EU legislation cover all relevant facets of 'statistical culture' in a broader context might be questioned.

Results / Proposed solution

Compliance with additional principles should be given if the objective is a high degree of statistical culture: Statisticians should try to avoid unrealistic expectations.

As a reaction to the obvious tendency of policy makers to formulate their political objectives in terms of precise target values and thresholds for statistical indicators statisticians should make clear which degree of comparability and accuracy of measurement can be accomplished. They should resist the temptation that 'everything goes'. Correct labelling is essential.

For the adequate use of data in modelling exercises it is of utmost importance to know whether the data was taken from the box labelled 'facts' or from the box labelled 'model results'. Principle 15 of the Code of Practice already asks for the provision of supporting metadata, but much more has to be done to inform users about the cognitive character of the data.

In a related manner much more information on the theoretical background of the concepts selected and the fact, that almost all concepts are (inevitably) 'value laden' needs to be provided.

Conclusions

Major contributions in enhancing statistical culture by the Statistical Societies can be expected in two important areas: They can be instrumental in improving the essential communication between compilers and users of data. Somehow analysts of all stripes and in particular those active in the academic world have lost essential communication with the compilers and synthesizers of the data.

As a consequence, popular discourse and policy making have suffered confusion. As soon as a legal act was passed official statisticians in the EU have to execute legal provisions. Some flexibility is only granted with respect to the statistical processes to be applied. Statistical Societies should provide fora for critical assessment and reflection of what is going on.