

Co-Operation between Academic and Official Statisticians

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1.- Introduction

The Malaguerra report (REFERENCIA) on the review of the profile, mission and tasks of the IAOS includes as a specific recommendation the setting up of appropriate mechanisms and measures aiming at effective identification of synergies and joint action between ISI sections. But it also suggests that this co-ordination within the ISI family should rather be "a cross-fertilization, which hardly ever results from top-down procedures".

In particular, one of the most effective ways of co-ordination between IAOS and the Bernoulli Society from a bottom-up perspective is given by the contacts established between National Statistical Offices (NSOs) and Universities. Academic statisticians (AS), as an important group of users of official statistics, can benefit considerably from these contacts, as they will help them to get an in-depth view of the data that they are using, and to exert some influence on the future statistical production along the lines of their research interests. On the other hand, these contacts are a clear asset for NSOs, as they can contribute to the solution of specific technical problems met in official statistics, and help in finding appropriate ways for providing training to Official Statisticians (OS).

This paper is an intent to explore the main characteristics of the links already existing between NSOs on one side, and Universities and Research Centers on the other, and also to get an inside view of the value that official statisticians attach to these links. The Conference of European Statisticians (CES), a subsidiary body of the UN Economic Commission for Europe (ECE), which is composed by the Heads of the National Statistical Offices (NSOs) of the North American, European and Central Asian Member States, dealt with the topic in its 2000 session. The authors assisted the Bureau of CES by preparing and disseminating a questionnaire to NSOs in the region, compiling and analysis the answers, and presenting them in the 2000 CES plenary session. Thanks to the active collaboration of the NSOs, from the answers of this questionnaire it has been possible to get, not only an extensive overview of the diversity of the types of contact followed by the different countries, but also some information on the perception of NSOs about the advantages, disadvantages, risks and costs of these contacts.

The results have been completed with the analyse of other documents, such as those produced in the Seminar sponsored by Eurostat and the Statistical Office of Romania, '*R&D in Statistics: Academic and official statistics co-operation*', and held in Bucharest, September 1998, and others listed in the bibliography.

2.- A short description of the survey

A questionnaire was designed to standardise the descriptions of OS and AS relationships in every country. The questionnaire considers three different topics. The first one concentrates on the existing infrastructure

for the links between NSOs and Academia, and includes questions on the type of contacts established, the way in which methodological research activities are carried out in NSOs and the existence of a Scientific Council at national level. A second part of the survey deals with the different modes of cooperation carried out in each country. The third issue dealt with is the perceptions of the NSOs on the interest of the cooperation developed, with consideration of the advantages for the NSOs, the advantages for academic statisticians -once again, as perceived by NSOs- and the factors that can set difficulties in the cooperation process.

35 Member States kindly gave in time their answers, that were compiled and summarised. The main results are outlined in the next sections.

3.- The infrastructure for the links between NSOs and Universities and Research Centers.

Contacts between NSOs and Universities are held almost everywhere in the ECE region. But very often they are kept on personal grounds, and formal contacts are not so developed. Relations with Research Institutes tend to be still less frequent and more formal.

In about a 75% of NSOs a centralized unit exists for the organization and coordination of research activities. In the remaining 25% research activities are undertaken by the operational units (units responsible for carrying out specific statistical operations).

A Scientific Statistical Council, including representatives of the NSO, of Universities and Research Centers and of other governmental bodies, exist in about two thirds of the countries in the region.

4.- Modes of co-operation between NSOs and Universities and Academia.

Co-operation is carried out under many aspects and in many different ways, depending on the specific culture of the country. Among them we would underline:

- More than half of the NSOs publish statistical research journals, including papers written both by academics and by official statisticians.
- In most of the countries some official statisticians act as part-time teachers in university. But very rarely university curricula in statistics take into account the specific interests of official statisticians. Only sampling methods are covered up to a certain level.
- Transfer of know-how usually takes place through occasional or regular lectures by academic experts to NSO staff, and also -although less frequently- through presentations by official statisticians at universities. Groups of study on specific issues, composed by experts from Academia and official statisticians, only exist in about a third of the countries interviewed.
- In most countries, the National Statistical Associations provide a forum of exchange between OS and AS, mainly in the occasion of their annual conferences.
- About half of the countries organize joint publication or presentation of official data analysis, and joint preparation of survey methodologies. But the participation of academic statisticians in the evaluation of the quality of official data is far less usual.
- Very often statistical offices provide several facilities to academic statisticians in relation with data dissemination. Easier or cheaper access to data is the most common one. Special access to micro-data, subject to confidentiality is only given in about half of the countries.

5.- Perceptions of the NSOs on the co-operation with academic statisticians.

All NSOs perceive co-operation with Academia as highly beneficial, emphasizing the many advantages derived from it, such as rapid access to new developments in statistics, increase of staff's qualifications and skills, increase of the research potential, solution to practical problems and better advice on methodological issues.

They also perceive this co-operation as advantageous for academic statisticians, as it allows them to get acquainted with practical aspects of statistics, which usually leads to new theoretical developments and allows for the testing of new methods and tools. The better availability of real data, to be used in their research and courses is also considered very positive.

Still, official statisticians detect and identify factors that can hamper the strengthening of the links between both communities. Among them, the heavy workload of NSOs under the pressure of the production plans, the lack of financial means to exploit project results or to finance shared posts, and the different culture and mentality of both communities, which very often determine a lack of interest of academic statisticians in the kind of applied research in which NSOs are mainly concerned.

6.- A suggested list of good practices

On the basis of these conclusions, a list of good practices has been drawn-up as a subject for further discussion.

- Flexibility and informality in the relations between academic and official statisticians
- Existence of an institutional forum of exchange ('scientific council') where academic and official statisticians meet. Organisation of formal working groups on specific statistical operations to discuss methodology and analysis. Evaluation of official data quality by university researchers
- Publication of research journals focused on topics related to Official Statistics
- Temporary secondments of university researchers or PhD students in NSIs supported with fellowships or scholarships
- Participation of official statisticians as part-time teachers in university programmes on statistics, in post-graduate courses and in presentations to the students of practical cases.
- Regular lectures by academic statisticians to NSI staff
- Asking for NSIs opinion in the design of university curricula in statistics or joint education programmes. Participation of NSIs in the examination of university students and other educational issues
- Joint seminars on issues of common interest
- Involvement of NSIs in the National Statistical Associations and their decision bodies. Special agreements to facilitate the participation of official statisticians in Associations' conferences.
- Privileges to Academic Statisticians in access to statistical data and micro-data.

REFERENCES

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SUMMARY

Academic and Official Statisticians are two groups of the statistical profession whose activities converge less often than it seems desirable for both of them. The authors, in the frame of the Conference of European Statisticians (a UN/ECE subsidiary body), studied the topic in the European, North American and Central Asian countries in order to assess the existing practices and institutional arrangements, and the perceptions on advantages and difficulties. A set of good practices is identified for discussion, which could be used by National Statistical Offices, Universities and Research Centres to establish a policy for fostering the relationships between Academic and Official Statisticians.

RESUME

Les statisticiens académiques et officiels constituent deux collectifs de la profession statistique dont les activités convergent moins fréquemment qu'il leur semble désirable. Les auteurs, dans le cadre de la Conférence des Statisticiens Européens (organisation subsidiaire de la Commission Economique des Nations Unies pour l'Europe) ont étudié ce sujet dans les pays de l'Europe, l'Amérique du Nord et l'Asie Centrale, dans l'objectif d'identifier quelles sont les pratiques nationales existantes, les accords institutionnels, et les perceptions sur les avantages et les difficultés des relations. Un ensemble de 'bonnes pratiques' est suggéré pour être discuté. Elles pourraient être utilisées par les Offices Statistiques Nationaux, les Universités et les Centres de Recherche pour établir des politiques de relation entre statisticiens académiques et officiels.