

# DEFENDING THE INTEGRITY OF OFFICIAL STATISTICS AND THE INDEPENDENCE OF STATISTICIANS

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## Abstract

The adoption of the UN Resolution on Fundamental Principles of Official Statistics in April, 1994, was a turning point in awareness by the international community of official statisticians and their stakeholders to defend the integrity of statistics and the independence of official statisticians. A few months after this adoption, William Seltzer presented ten modes of undermining statistical integrity in a famous UN/DESIPA Working Paper Series: Politics and Statistics: Independence, Dependence or Interaction. He also proposed factors contributing to maintaining this integrity.

Recently, in 2014, the UN Statistical Commission celebrated the 20th Anniversary of the Resolution, a few weeks after the endorsement of the Fundamental Principles by the UN General Assembly. Since their adoption, further many other international or national organizations have adopted recommendations or codes of practice in line with the UN Resolution (IMF's: SDDS and GDDS, DQAF; European Union: European Statistics Code of Practice; African Union: African Charter for Statistics). France and UK have created independent statistical authorities and many countries have adopted national codes of practice. But the UN Resolution remains the Mother of all these initiatives and has contributed to increase the data quality that is an important objective for the whole statistical community, both at international and national levels.

Unfortunately, during the last twenty-two last years, the UN Resolution and the active support by the international community (through the ISI for instance) could not stop several violations of the most basic ethical rules, including in countries once thought safe from such bad practices, or may endanger the independence of official statisticians, in particular the independence of chief statisticians. The paper will recall some of these cases and presents some proposals to safeguard independence of statisticians and integrity of statistics. Some responses to such bad practices may also be organized by statisticians themselves, often through the creation of active professional statistical societies or by using the international network of national statistical and organizing at international level "Clubs of Friends". The role of the ISI Advisory Board of Ethics may be essential to support statisticians in trouble or denounce bad practices. Strong links with users and medias are also important. National Statistical Councils represent one important component of the dialogue between producers and users of statistics and should be developed.

**Key words:** 20th Anniversary of the Resolution on Fundamental Principles of Official Statistics, independent statistical authorities, codes of practice, violations of ethical rules.

## 1. Introduction and background

Just one year ago, in December 2015, two "bad stories" became "success stories". In Canada, of the first decisions taken by the recently elected Prime Minister, Mr Justin Trudeau, was to

abolish the decision taken five years earlier by its predecessor without any consultation with the statisticians or with the users to eliminate the long questionnaire of the census of the population. In Argentina, the new President of the Nation elected on November 22, Prof. Mauricio Macri, decides just after his inauguration to rebuild the Instituto Nacional de Estadística y Censos (INDEC) after eight years of manipulation of the official statistics by the previous Kirchner administrations. Two lessons can be drawn from these two events:

- one can think at first of political interferences in dictatorial systems where statisticians and statistical offices are generally forced into the official line of the political power as it was the case in Nazi Germany after 1933 or in the former German Democratic Republic where statistics were manipulated to illustrate the alleged successes of the communist system; but the two events I have just quoted show that such interferences are not the monopoly of dictatorial systems and may also exist in democratic countries
- the support of the international statistical community through official statistical bodies or through international or national NGOs is essential; in particular, in the Argentine case, the IMF played a very important role.

In 2010, the UN Statistical Division decided to organize a World Statistics Day, celebrated on 20 October, 2010. The keywords displayed on the page of the WSD site prepared by the UN Secretariat were **Service – Professionalism – Integrity**. These three key words are fundamental for any paper discussing ethical issues in official statistics. In modern democracies, it is largely admitted that free access to statistical information is one important constituent of the citizens' right to information, necessary for an efficient functioning of these democracies. On the other hand, the essential confidence in official statistics of all categories of users can be reached only if all stakeholders accept certain ethical rules and good practices, so that users of official statistics may be sure to get reliable and trustful data and suppliers of raw data respond favorably to the requests for information placed on them by statistical offices. That means that governments have to create an adequate environment and to provide a fair juridical and budgetary framework to produce and disseminate statistical data meeting all users' needs and not only their own needs and to guarantee the respect of best practices and the integrity of statistics. But it also means that the statistical community as a whole (including the national and international statistical societies) has to get and promote a set of ethical principles and good practices.

The adoption of the UN Resolution on Fundamental Principles of Official Statistics in April, 1994, was a turning point in awareness by the international community of official statisticians and their stakeholders to defend the integrity of statistics and the independence of official statisticians.

## **2. An historical perspective of ethical issues in official statistics. Birth of the Resolution**

Building such a set of ethical principles and good practices was a long and difficult process. During the 20 years after the end of the 2<sup>nd</sup> World War (1945 – 1965), statistical legislation in developed countries put the accent mainly on confidentiality and protection of individual data and co-ordination of statistical systems; but there were no real discussions between producers and users about the content of statistical programs, and occasional pressures on NSOs had sometimes affected the integrity of official statistics and hampered the necessary professional autonomy of official statisticians.

During the following 25 years (1965 - 1989), statistical offices gradually shifted from a supply-driven strategy for providing statistics to a demand-driven statistical strategy; National Statistical Councils were created in a number of countries and official statisticians started to discuss with their users the best strategies for disseminating statistical information and more generally the role of statistics as a service to society. These discussions permitted some kind of public control by the stakeholders of the national statistical systems and therefore

contributed to increasing the independence of statisticians and the integrity of statistics. In parallel, as a reaction of the society in front of the EDP developments, commissions or ombudsmen, aimed at strengthening protection of the privacy and confidentiality of individual data, were implemented in many countries in response to societal concerns about privacy. In the centrally planned economies, the main function of official statisticians was to check that the most important economic results be in accordance with the requirements of the central planning authority. Statisticians were in charge of a huge bookkeeping activity. The ministries in charge of economic sectors requested individual information while no real decision was taken at the level of the production units. In general the macroeconomic aggregates were kept secret and accessible only to the highest authorities. In that way, statisticians' tasks were very different as between centrally planned economies and market economies.

After the fall of the Berlin Wall and the collapse of the communist systems, the market-oriented system obliged a far greater number of people with economic and social responsibilities to take decisions. Such decisions implied the use of an adequate information system and, in particular, sound and relevant statistical information. Moreover, it was vital for statisticians from Central and Eastern Europe to gain the confidence of the public in the information they were to produce; they were fully aware that it was not so easy to face this new challenge and to gain this indispensable trust of the public. They were looking for new references, new landmarks, to serve as a framework in which to fulfill their duties. Such references were maybe not so different from the strictly technical point of view, but totally different where the concept of the role of statisticians in society was concerned. They recognized that economic and social statistics should be both legitimate and credible, i.e. they should satisfy the criteria of impartiality, reliability, relevance and transparency. That was the origin of the adoption of the Fundamental Principles of Official Statistics by the Conference of European Statisticians during its 39<sup>th</sup> session held on 17 – 21 June 1991 and their endorsement at the ministerial level by the plenary session of the UN Economic Commission for Europe on 15 April 1992. By the end of 1992, William Beeger, Chair of the UN Statistical Commission, contacted the other regional statistical divisions with a view to having ECE decision C(47) circulated to all member countries in their regions and to obtaining their opinions concerning the possible application and usefulness at the regional and global levels of the principles set out in the decision. More than hundred UN member countries were in favor of a declaration of principles and agree with the concept of universal significance of the "European" principles. The Resolution was therefore adopted at the global level on 15 April 1994 in New-York as the UN Resolution on Fundamental Principles of Official Statistics, and then endorsed in 2013 and 2014 by the ECOSOC and the UN General Assembly.

After the adoption of the Resolution, a number of other international or supranational organisations contributed to a strong endorsement of the principles by actively using them as a point of reference in their relations with their member countries as well as the terms of their multilateral responsibilities. And all official statisticians and their stakeholders have progressively become fully aware of the importance of the UN Resolution and recognised the professional value of the concept of independence:

- the IMF proposed to its member countries to subscribe to the General Data Dissemination System (GDDS) or to the Special Data Dissemination Standard (SDDS) ; it also developed the Data Quality Assessment Framework (DQAF) to support overall strategies and action plans for the enhancement of data quality;
- for the accession of new countries to OECD, the OECD Council decided to examine the legal and institutional framework for statistics of the applicant countries, and assess the quality of the statistical data available;
- a number of countries have proposed national codes of practices, descriptive or prescriptive, and codes of conduct that state the main principles governing the collection, processing and dissemination of official statistics;
- during the past twenty years, the statistics legislation in developing and transition countries has converged with the best practices observed in developed countries, in

particular by improving legal protections (status of official statistical bodies, data confidentiality, appointment of the head, etc.) or through providing some practices guaranteeing improved transparency such as pre-announced schedules of released dates for statistics;

- in response to the Greek misreporting, the European Commission promulgated on the 25<sup>th</sup> of May, 2005, a European Code of Practice for the national and community statistical authorities as a recommendation on the independence, integrity and accountability of the national and community statistical authorities;
- the African Union Commission has adopted in 2009 an African Charter on Statistics by reference to the European Code; similar codes have been prepared and adopted in other regions, eg ECLAC and ASEAN;
- most of the developed countries and a large number of transition and developing countries have created national statistical councils that are playing an important role in the preparation of national statistical programs, including taking account of the needs of all users and not only the needs of governments;
- more recently “Independent Authorities” have been created to guarantee statistical integrity in the UK and in France; also, a European Statistical Governance Advisory Board (ESGAB), reporting to the European Parliament and the European Council, has been created at the European level.

### **3. How to react when independence of official statisticians and integrity of official statistics are endangered?**

In spite of the efforts of national and international statisticians, there are many examples in the contemporary history of official statistics where statistical integrity has been undermined and the independence of official statisticians threatened.

In a famous UN working paper<sup>1</sup> written few months after the adoption of the Resolution in 1994, William Seltzer described eleven modes of undermining statistical integrity:

- i) extending the role and missions of the official statistical bodies to political analysis or political work;
- ii) unfair cutting of budgetary resources;
- iii) political appointment of staff members of the official statistical bodies;
- iv) pressures to suppress or extend statistical fields or statistical series;
- v) political pressures on methods, concepts, classifications, definitions, ...;
- vi) using classifications for non statistical uses without official statisticians' acceptance;
- vii) censoring or altering data;
- viii) violating the rules on the extent and timing of the release of data;
- ix) threatening to data confidentiality;
- x) using the statistical agency for political analysis or other political work and;
- xi) organizing active campaigns to discredit statistical services outputs, methods, or staff.

These threats may also concern the preparation of statistical programmes as well as in the collection and processing of data or the dissemination and analysis of aggregated data.

Political authorities (governments or parliaments) are often tempted to intervene in statistical activities by interfering or even manipulating the technical choices of statisticians, or by limiting the role and missions of official statistical bodies. Outsiders often make inaccurate use of statistical data (which is particularly dangerous when these outsiders are political decision makers) or they may organise a media campaign to discredit the statistical service, its outputs,

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<sup>1</sup> See UN/DESIPA Working Paper Series: *Politics and Statistics, Independence, Dependence or Interaction*.

methods, or staff. Sometimes, a wrong or inappropriate use of a statistically-driven formula may, in the eyes of the public, impose on statisticians a responsibility for political decision-making; in this case, the additional burden placed on official statistics may be enormous and often lead to bad practices. Finally, sometimes data are censored or their publication is delayed for good or bad reasons. Such events are frequent in developing or in transition countries, but may also happen in developed countries, for instance in situations where the statistical services are decentralised in line ministries that are generally weaker than the central statistical office. One unfortunate case is the announcement of statistical results by a political authority.

Until now, in spite of the impressive catalogue of institutional responses, many problems remain on the agenda, even if the situation seems globally better than twenty years ago; the text of the Resolution has been largely disseminated and popularized. Many countries have prepared and adopted codes to propose additional measures and to go deeply into the defense of the integrity of official statistics. The laws on official statistics passed during these past twenty-five years are very often referring, directly or indirectly, to the UN Resolution. The practice of peer reviews has become general, not only in developed countries. The adoption within the European Union of the European Code of Practices was a very positive step for improving the effectiveness, efficiency, transparency and relevance of official statistics by dealing with such issues as professional independence, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, impartiality and objectivity. The creation in the UK and in France of independent authorities and at the European level of the ESGAB is full of promise for the future. The increasing practice of systematically organizing “peer reviews” may also contribute to improve integrity of statistical systems.

The UN Resolution and the rules and codes of practice adopted by different international organizations are ways to maintain statistical integrity in the face of political pressures or pressures coming from different lobbies. But responses organized by the profession itself, in particular through the international or national statistical societies are also an important way to defend professional independence and statistical integrity. Some societies have adopted ethical codes that address to individual professional statisticians. One of the first attempts to formalize ethical rules was certainly the ASA Code of Conduct for Statisticians adopted in 1979 by the American Statistical Association under the leadership of W. Edwards Deming, now, after revisions in 1989 and 1999, the ASA Ethical Guidelines for Statistical Practice. Deming was also one of the promoters of the Committee of the International Statistical Institute (ISI) that prepared the ISI Declaration on Professional Ethics adopted during the Centenary Session of the ISI held in Amsterdam in 1985 with the aim to document share professional values, and to promote knowledge and interest in professional ethics among statisticians worldwide. After 25 years and the passage of time, the ISI decided to revise and update its declaration; this revised declaration is posted on the ISI Website<sup>2</sup>.

The ISI Declaration is very general and applies to the statistical community at large (academic statisticians, researchers, statisticians working in industry, etc. and not only to official statisticians). It doesn't take into account two specific characteristics of official statistics:

- official statisticians do not work for a specific consumer or a small group of users; they receive public funds to be at the service of the society at large and to contribute in their domain to the citizens' right to information;
- the individuals' right to privacy very often conflicts with the society's right to information (in

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<sup>2</sup> The twelve ISI ethical principles are: pursuing integrity; clarifying obligations and rules; assessing alternative impartially; conflicting interests; avoiding preempted outcomes; guarding privileged information; exhibiting professional competence ; maintaining confidence in statistics; exposing and reviewing methods and findings; communicating ethical principles; bearing responsibility for the integrity of the discipline and; protecting the interests of subjects.

order to know its collective characteristics);

#### 4. Looking forward?

One question is often raised: do international organisations or scientific NGOs get legitimacy for taking measures in case of malpractices or infringement of the fundamental principles or any other international ethical standards. After all, governments are sovereign and if some government is comfortable with trashy information, who is in a position to tell it otherwise? Unfortunately, however, in our globalised world, the statistical malpractices of one country may throw doubt upon the integrity and competence of all others. It is not possible for instance to respect the rules of the WTO without a reliable statistical information on the partner countries. Moreover, when countries are member of economic or monetary unions, it is necessary to organise some kind of “multilateral surveillance”.

International organizations may put some actions on their agenda:

- some methodological issues should be deepened: is statistical information a “public good” and what does it mean? what ethical rules should be used for data not primarily collected for statistical purposes? should responses be compulsory or not? .....
- it seems desirable to conduct periodic reviews of the ten principles through questionnaires sent to member countries reports and peer review; moreover some mechanisms might be defined in case of violations of the principles;
- pursuing and developing training on ethical issues; organizing an advocacy program, in particular in developing countries in liaison with PARIS21; helping member countries to pass legislations or regulations making binding the respect of the principles;
- the “Country Practices Database” established in 2000 by the UN Statistical Division has registered only good practices but there is nowhere any recording of “bad practices”, problems arising all around the world and possible solutions for restoring public confidence in official statistics after attacks, whatever might be the origin of the attacks; of course, it is not easy for the UN or any other intergovernmental institution - even not possible – to take direct responsibility for such a data base, but the international community of statisticians may certainly organize itself through its network composed by ISI and national statistics societies to build this database.

In addition to these institutional responses, official statisticians have today many tools they may develop by themselves to support their professional independence and therefore contribute to the integrity of statistics. They may create – or be active in - professional national statistical societies. The role of the Royal Statistical Society in the debate in the UK after the decisions of the Prime Minister in 1981 was fundamental in the change of mind of the British government some years after the unfortunate decisions taken by the Prime Minister in 1981. In several countries, the national statistical society is considered by the political authorities as the representative of the civil society as a whole.

Moreover, the international network of national statistical societies and the ISI may be helpful, not only for exchange of information between statisticians (in addition to information exchanged through intergovernmental organizations), but also to organize events or create a “club of friends” when necessary to support colleagues when they have to deal with a difficult situation, as it was the case in Argentina. In case of intrusion of political authorities in the methodological choices of statisticians in a country, the presidents of the ISI and NSOs may support the statisticians of these countries. Also statisticians in most countries have now established strong links with users and the media, who are generally good allies.

Several statisticians have also understood the importance of having a dialogue with political decision-makers, without compromising official statistics; it is always useful for official statisticians to understand the needs of politicians who are one of the main constituencies of

statistics users and for politicians to understand the constraints the official statisticians face in fulfilling their mission.

## 5. Conclusion

I would like to leave the final word to Ivan Fellegi. He declared during a conference he gave in Budapest three months ago about the story of the 2011 Canadian census quoted in the introduction:

*Some 20 years ago I was attending the Conference of European Statisticians. The Soviet bloc had just recently collapsed and we were all seized by the urgent need to help the so-called “transition countries” to adapt to the standards and values of developed democratic countries. Someone had the brainwave of committing to paper a codification of long held basic values that we all shared. I remember my reactions at the time: first of all, Canada certainly does not need them. More generally I thought that, whatever the country, it is too bad if one has to spell out black on white these basic truths. However, I understood that the “transition countries” did not as yet have the time to develop the broadly shared values that in developed countries have already served as the underpinnings of official statistics for decades. So I went along with the idea and actually played a role in drafting the text. The result, after its adoption by the United Nations, came to be known as the Fundamental Principles of Official Statistics. Little did I guess that twenty years later I will be referring to them as something to which Canada has to re-dedicate itself.*

For me, Ivan’s declaration is an excellent summary of our shared objectives: we are all convinced that the Fundamental Principles have become a de facto code of conduct for the global statistical community and represent the core values of our profession and the ethical standards against which our work is being judged. Nevertheless, many problems remain on the agenda. Meetings and seminars have been organized; the text of the Resolution has been largely disseminated and popularized. But one problem remains present: both governmental institutions and scientific NGOs have been prolific for years in producing declarations and papers on “good practices” but, most of the time, in case of a serious attack on the independence of statistics or use of “bad practices”, all institutions, official or even non-governmental, may get some difficulties in reacting appropriately and rapidly.

Moreover, as Ivan said in his conference, *Canada is an enlightened country with a typically strong respect for good governance. If the events I described can happen there, then they can happen anywhere.*