OFFICIAL STATISTICS
IN A MODERN SOCIETY

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Abstract

The modern democratic society cannot efficiently and rigorously function in the absence of a solid basis of relevant and reliable statistical data, allowing for an easy and user-friendly access. Representing a “public good”, in the contemporary society, the official statistical information is meant to serve the whole society, under the conditions of maximum transparency, impartiality and equal treatment of all the categories of data users.

Official statistics should adapt itself to the changes taking place in the modern society and should comply with its increased demands for high quality information. On its turn, it imposes to both national and global statistical systems major tasks of structural changes in the activity of producing and disseminating official statistics, as well as in the communication with its partners from the informational flow upstream, but particularly from its downstream – these being the target recipients of statistical data.

The article presents the vision on the official statistics role, functions and tasks in the modern society, as against the major challenges regarding the transformation of statistical information into knowledge, the promotion of statistical literacy and culture, ensuring the usefulness and the large scale use of statistical data.

Key words: official statistics, quality, communication, statistical culture, integrity

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The core prerequisite for a modern, knowledge based society setting up, functioning and development is the high level of information of the community about the economic, social, demographic and environmental state of arts. This one, on its turn, supposes free access to high quality statistical information, by means of which statistics provides the solid necessary basis...
for interpretation and for economic and social analyses. By contributing to the setting up of informational capability both at national and international level, official statistics becomes more and more important in view to substantiate the decision making process at various levels, including the drawing up, implementing, monitoring and assessing the achieved policy results in various fields. Thus, statistics supply represents the basic informational infrastructure for the decision-making process.

We could mention here an aphorism of the great writer Goethe, who says that “the figures are not only governing the world, but they are showing the way the world is governed”.

Official statistics:
- Allow for objectively assessing the society state of play and its evolution;
- Are used in view to substantiate policy decisions, to formulate and evaluate policies and to achieve a high quality public management, providing inputs for the political debates of any nature;
- Provide a snapshot on public authorities’ activity and, on this basis, give citizens the possibility of appreciating their performances.

Statistics plays a major role in the whole economic and social life, offering the users the opportunity of precisely knowing what happened and, in perspective, outlining the quantifiable undertakings and expectations, as well as the general trends of human development.

Official statistics role and tasks in modern society

The evolution of statistics role as “public good”

Statistics allow for catching the occurred changes, for observing the entailed implications, providing the opportunity for an effective and timely response. Statistical information is a support for our navigation in the multiple and changeable streams of modernity.

Statistics mean, in fact, a cornerstone of democracy, essential for meeting the citizens’ right of being informed. Thus, at the same time with policy makers, the citizens need more and more statistical data than ever, with a view to exercise their democratic rights, to participate in public debates and to discern in the electoral process in favour of the best political representatives.

Starting off with the recognition of the fact that statistics of XXIst Century should cope with the fast changes and with the new challenges of modern era, it becomes obvious that the society development is making off the official statistics and urges for adjustments of its role, functions, tasks and
proper activities. The changes in official statistics of modern society become more and more spectacular. Unlike the former society based on totalitarian policy, statistics in a democratic society is no longer a control tool and is no more the exclusive privilege of a narrow users’ group – the one of state authorities. Contrary to former mentalities, according to which the statistical bodies had the exclusive task of meeting information requests of state administration, the activity of the national statistical institution in modern society is oriented towards the setting up of a developed system of statistical data dissemination towards meeting the interest of all user categories of statistical data, without discrimination and preferential regime.

Therefore, official statistics is nowadays a “public good”. In modern society, official statistical information addresses and should be available to a wide range of users – to the whole society, under maximum transparency and impartiality conditions, with equal access of all user categories in terms of volume, content, quality and timeliness. The information and communication technologies (ICT), particularly the Internet, due to their exponential proliferation, make all these desiderates achievable, while the dissemination of statistical information became largely accessible.

Statistics transformation into knowledge and promotion of statistical culture

The function of statistics, however, in a modern, knowledge based society, is not limited to the production and dissemination of high quality information.

According to Albert Einstein “information is not knowledge”. Statistical information has never stand to reason; on the contrary, for many users these represent highly abstract phenomena. The more new, sophisticated, complex and diversified is the official statistical information provided by the statistical institutions and by other actors from “information market”, the more complicated it becomes for users to identify the appropriate information and to assess its quality. Thus, despite the (continuously expanding) information excess, where the common user faces an increasingly difficult navigation, it creates the feeling of not meeting the real user requirements for high quality statistics.

The asymmetry between information and knowledge or understanding of this information is a problem of the whole society. Thus, the necessity of explaining not only the results of statistical surveys/compilations, but of the methodological issues related to statistics production and dissemination as well, becomes crucial. The understanding, the perception of statistical information quality, the trust in official statistics, as well as the data use degree, are closely

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interrelated. Thus, the statisticians face the challenge of actively contributing to statistics transformation into knowledge and decisions, as consequence of increased transparency of statistical information, of data explanation and analysis, of their framing into the appropriate context, in a clear manner, easily understandable for the users. Statistics should be provided in a way and manner that is ensuring the user-friendly and adequate access, the knowledge, the understanding and the use of statistical data by all the users.

Official statistics usefulness and use depend on the credibility reliability of these data, as well as of the activity of national statistical institutes as a whole. Thus, in view to produce high quality statistics and to communicate with users, the promotion of statistical literacy and culture, as basic pillars of statistics utility in the benefit of citizens and of the society is highly important and constitutes a major task of the national and international statistical institutions. In view to cope with the challenge of statistics evolution from the exclusive position of “information provider” to the one of “knowledge builder”’ fundamental changes in the activity of statistics production and dissemination are necessary, through new, innovative approaches within the statisticians work. On its turn, it requires a creative thinking, resources reorientation, a sound communication and cooperation with partners, acquiring new abilities, institutional changes and a better integration within the national and international statistical systems.

In the above mentioned context, importance is given to the promotion of statistical literacy and culture, to the stimulation of scientific approach, to creativity, commitment and communication at all levels, to the recognition of statistical institutions as part of “knowledge industry” and not as part of bureaucracy, to the maximization of communication with final users, by using new ICTs and by rendering a permanent nature to the dialogue with media, in view to improve the way it interprets and disseminates official data. A statistical culture, promoted by the national statistical institutes among the public at large should lead to a diminution of misunderstandings and to an increased capability of properly catching the significance and meaning of statistical information, of analysing and using the data provided to the public. This would allow statistics to become more relevant and useful.

In view to identify the most appropriate methods of providing statistical information, as well as the core set of relevant indicators, the setting up of a sound and permanent communication between the statistical authority and the statistical data users is crucial. Supplying high quality statistical services, in a transparent and predictable manner, with an adequate debriefing of statistical information regarding the content, deadlines and dissemination ways, with obtaining the users feedback represent the key elements for ensuring the appropriate dissemination of high quality official statistics.

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The involvement of new actors (non-governmental organisations, youth associations, etc.) through repeated use and dissemination of statistical information is required, at the same time with the awareness of the modality by means of which statistical products could be useful in the compilation of “personalised information” (for example, giving the possibility of compiling a personalised consumer prices index, of putting the stress on detailed data at regional level, etc.). The more active involvement of scientific community and of other society representatives is of major importance.

The use of modern dissemination platforms implicitly contributes to widening the access, the knowledge and the consumption of statistical information, facilitating a global audience, at the same time with the inclusion of more international comparisons in standard statistical products. ICT development widens, to a previously unimaginable dimension, the possibilities of meeting users’ rights of easily and quickly accessing statistical information, via web solutions.

**Expectations from official statistics in modern society**

The expectations from official statistical data evolved over time, being briefly and conclusively expressed in the Fundamental Principles of Official Statistics adopted by UN Statistical Division in April 1994. These have been further developed and refined in the European Statistics Code of Practice adopted on February 24th, 2005 by the Statistical Programme Committee and promulgated in the European Commission recommendation of May 25th, 2005. The Code defines 15 key principles related to:

- **Institutional environment** (professional independence, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, as well as impartiality and objectivity);
- **Statistical processes** (sound methodology, appropriate statistical procedures, non-excessive burden on respondents, cost effectiveness);
- **Statistical products** (relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity).

The requirements related to institutional environment and to statistical processes represent the general, fundamental framework for ensuring the proper functionality of official statistics offices, for the high quality accomplishment of its tasks and implicitly the official statistics reliability. The rigour imposed to statistical processes complete the requirements envisaging institutional and organisational factors, finally ensuring the large scale *usefulness* of statistical information, which is in fact the purpose and the substance of statistical activities.

**Challenges and solutions in the globalisation era**

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Issues related to the measurement of new social, economic and environmental issues

The modern society, namely the information society, is characterised by large scale, deep and fast changes in human life and activity. In the globalisation era, the social, economic, demographic and environmental phenomena become more complex and inter-dependent, both at national and international level.

The need for developing a culture of decision-making process, based on information, the intensification of activities from the economic, political, social and cultural life of citizens, particularly in non-governmental organisations, entailed increasing requests for statistics. The institutions belonging to central and local public administration, as well as the academic and the business environments and other representatives of civil society formulate increased needs for statistics, both in terms of quantity and particularly in terms of quality, content, coherence, timeliness and the ways statistics are disseminated. The citizens are more and more actively seeking for data of economic, social or cultural nature. The globalisation phenomenon, on its turn, providing for tremendous opportunities of economic and social development, stimulates the vertiginous increase of requests for new, coherent and comprehensive statistical data.

Thus, both the “information market” and the “official statistics”, in its position of “public good”, are under the increased pressure of data needs, facing major challenges.

The users need more and more integrated and abridged data, as the observed phenomena become more complex and inter-dependent. New data requests are formulated towards statistics, in relation with: globalisation, sustainable development, living standard, social inclusion, population ageing and migration, knowledge, climatic changes and natural resources protection, energy efficiency, etc. On the other side, the requests submitted by various user categories are quite specific and divers in terms of information volume, detail level, timeliness, etc.

**Globalisation** generates new challenges that should be assumed by statistics in terms of concepts, methods and standardisation of procedures and production processes, materialised in new statistical products and services. The globalisation impact is felt in all the economic, social and environmental fields, therefore imposing the review of some statistical concepts.

Many of welfare issues can no longer be quantified solely by GDP and, although a correlation between GDP and welfare exists, the indicator in
its current form cannot express a real content of welfare, entailed not only by the economic dimension, but by the social and environmental dimensions as well. The need for improving the indicators and data complementing GDP is a reality, in view to express the progress achieved in all issues related to welfare (health, environment protection, etc.). The drawing up of appropriate methodological and operational frameworks for an integrated approach of this matter is necessary. The use of “objective” measures of welfare should be complemented by “subjective” measures: living standard and/or happiness. The subjective indicators are based on the assumption that welfare depends on people perception of the events and situations occurring in their lives.

Knowledge became a driving force for changes at society level and influences all the human life aspects. Statistics task is to conceptualise, record and finally describe the multiple sides of knowledge in statistical form: knowledge generation, accumulation, assessment, storage and use, as well as its change into innovation. Communication is closely related to knowledge and faced substantial changes from the standpoint of its content and coverage. Therefore, statistics on research, development and innovation, on education and training should be reviewed.

The climatic changes and natural resources protection are subject to intensive debates at world level. The political agenda includes issues related to pollution, particularly with respect to greenhouse emissions, to energy consumption which should be rendered efficient, to bio-diversity and biological reserves preservation. The integrate economic and environmental accounts provide for an ideal framework for the holistic approach of issues dealing with environment, with the economic and social evolution, completed with specific accounts related to water, transport and agriculture, etc. The environmental accounts provide data quantifying the substantial contribution of natural resources to economic development and welfare, pointing out, at the same time, the costs associated to pollution or resources depletion.

The national statistical system integrated approach as response to challenges

In view to cope with the increasing information requirements, in an effective manner, the conceptual integration of statistical fields is absolutely necessary at data sources and statistical tools level, that is a holistic approach of statistics.

The European Statistical System (ESS) is already actively engaged in the process of reacting to the challenges entailed by the increasing informational needs of contemporary society, in an efficient manner complying with the
Code of Practice. Thus, revolutionary, large scale changes of the current European Statistical System are expected in terms of content and form. The ESS modernisation would be based on the integrated, holistic approach of statistics. As consequence, the data collected both from statistical surveys and from administrative sources managed by various institutions, as well as from the bookkeeping systems of entities are to be used for statistical purposes, in view to compile statistical indicators, thus increasing the data effectiveness. Modelling techniques will be used in view to explore the opportunities of using partial data.

The integrated approach of statistics – the possibility of setting up relationships between various information dealing with a certain phenomenon, but taken over from different fields (for example, data on small and medium enterprises activity or those related to salaries and employment, etc.), is supposed to expand statistics coverage, improving in this way the capability of meeting a wider range of users needs, in a more flexible manner. The integrated model supposes the extensive use of data collected by authorities for statistical purposes, such as fiscal data, data on salaries and social contributions, data related to labour market, etc. Obvious advantages could be obtained by (re)using administrative data for statistical purposes, as well as from using other outsourcing information, such as, for instance, data generated by the bookkeeping systems of enterprises. Efforts are still necessary in order to ensure data quality since, in many cases, outsourcing information (data taken over from non-statistical sources) is not available in the format required by official statistics.

The statistical quality management system should be further developed, this being a crucial prerequisite for complying with the European recommendations towards implementing the best practices. This, in its turn, will contribute to national statistics compliance with the European Union quality standards, while improved transparency would favour statistical data credibility and usefulness.

Meantime, the integrated approach also supposes a better coordination and collaboration within the national statistical system and the improvement of cooperation at international level, primarily at European level.
Conclusions

Official statistics, in its position of “public good”, as well as the “information market” in general, are facing increased pressures related to information quantity and quality, these representing major challenges. In order to cope with the increasing information demands, in an efficient manner, the conceptual integration of statistical fields, a holistic approach of statistics is necessary, encompassing data sources and statistical tools.

One can assume, statistics functions in modern society are not limited to high quality information production and dissemination. The major task of statisticians is to actively contribute to the transformation of statistics into knowledge and, on this basis, into decisions, through an increased transparency of statistical information, data explanation and analysis and their better framing into the appropriate context in a clear manner, easily understandable. Statistics should be provided in such a way as to ensure user-friendly and adequate access for a wide range of users.

Both European and national statistics should adapt to the conditions of an “knowledge society”. Thus, the way of thinking, conceiving and rendering operational the information flows should radically change at statistical institutions level. At the same time, the national statistical system should cope with essential changes in the activity of official statistics production and dissemination, strengthening the cooperation with its partners, especially with data users.

References