Professional independence and accountability of statistical agencies are crucial: A brief history of the Greek official statistics

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Abstract. This paper presents the evolution of the Greek statistical system and the journey towards the "professional independence and accountability of statistical agencies" which, according to the preamble of the resolution adopted by the United Nations General Assembly on the ten Fundamental Principles of Official Statistics, are imperative for ensuring public trust in the integrity of official statistical systems and confidence in official statistics. Also, the individual contribution of the United Nations experts for the establishment of the modernized statistical agency during the 1950s and 1960s is recorded and a brief history of the census is presented.

Keywords: Fundamental Principles of Official Statistics (FPOS), National Statistical Service of Greece (NSSG), United Nations Technical Assistance Program, census

1. Introduction

In order to study the literature of national statistical histories, Desrosières [4] distinguished between two broader periods: the first included works written from 1800 to 1920 and the second, "the new wave of national statistical histories", included works written since 1975. He pointed out that, during the first period, works like Koren's [12] book "devoted large sections to historical accounts of statistical activities in different countries ... presented in factual, chronological, and institutional form ...listing the establishment of offices, administrative ties, censuses and other administrative compilations" [4]. For the second period, he argued that "a relative new kind of history has developed in the past two decades, which - in a certain manner, but in very different forms - resurrects the nineteenth century histories of national statistics" [4]. This "new wave of national statistical histories" includes three categories of works. The first category consists of histories compiled by the statistical offices themselves, often unsigned, focusing "on in-house activities, organization charts, institutional ties, the major operations, working conditions, buildings, and technological change" [4], which Desrosières [4] argued that they "cannot be regarded as histories of statistical offices". However, the second category – which for Desrosières [4] "fits this description" – includes works commissioned by the statistical offices to members of their staff which are "more detailed and technical histories, some of which are highly informative ... They are arranged by field, type of survey or source, processing technology, method, etc. ... [proving] vital source material for a comparative history of official statistics (still to be written), because they contain more firsthand technical information" [4]. The third category includes works "produced by academics who were not members of the offices . . . As a rule, these histories are less detailed in their examination of statistical recording and tabulation methods, but they provide detailed analysis of the role of official statistics, their institutional and political contexts, and the networks of their social uses" [4].

The United Nations Statistics Division [25] provides country profiles for the statistical agencies worldwide that allow for an attempt to write a comparative history of official statistics. In this context, this paper presents the evolution of the Greek statistical system

and the journey towards the "professional independence and accountability of statistical agencies" (Section 2) which, according to the preamble of the resolution adopted by the United Nations General Assembly on the ten Fundamental Principles of Official Statistics (FPOS), are imperative for ensuring public trust in the integrity of official statistical systems and confidence in official statistics [23].

In 2012, the United Nations Statistics Division [24] conducted a survey using a mail questionnaire in order to investigate the implementation of the ten FPOS by the statistical agencies worldwide. The results of this survey were presented as they compared to those of the survey conducted in 2003. Questions pertaining to "professional standards and ethics" and "accountability" were included in the context of FPOS 1 and 2, respectively [22,24]. Unfortunately, these reports published only aggregate data by economic groupings (developing, least developed and developed countries) and geographical region (Africa, Americas, Asia, Europe and Oceania) and therefore there is no information on the performance of the statistical agencies for each participating country. Although this mail questionnaire is a valuable instrument in assessing the implementation of the FPOS, as it will be shown, collecting relevant event data [19] and media claims [7], as practiced by the European Social Survey, is a prerequisite to safeguarding the quality of its results.

Also, the individual contribution of the United Nations experts for the establishment of a modernized statistical agency during the 1950s and 1960s is recorded (Section 3). The paper ends with a brief history of the census (Section 4) and concludes with a brief summary (Section 5).

2. The evolution of the statistical system: The journey towards independence

The investigation of the evolution of the Greek statistical system and the journey towards independence is based on the name changes of the statistical office because according to Desrosières [4]:

After World War II, the statistical agencies (or *bureaux* as they were known in French) underwent a transformation in size and character. They often became "institutes" or "offices": these name changes suggest a gain in autonomy vis-à-vis the public administration in the strict sense (the old "bureaucracy"), and a move toward a more "scientific" sta-

tus (the "institute"), or, at any rate, a more specific and autonomous status (the "office").

 $[\dots]$

Far more recently – and, no doubt, under the influence of the communication strategies promoted by business firms – statistical offices are shedding this type of name to become Statistics Canada, Statistics Norway, Eurostat, etc.

As it is well known, "the precursors of the current statistical institutions were set up at Adolphe Quetelet's instigation in early Belgium. The Statistical Bureau (1826) was the executive body and the Central Statistical Commission (1841) ensured the coordination of all statistical initiatives in Belgium" [18]. Along these lines, more recently, National Statistical Authorities have been set up either as independent organizations overseeing the respective statistical offices (e.g. UK Statistics Authority) or statistical offices have been reorganized and renamed as such (e.g. Hellenic Statistical Authority) so as to gain a more autonomous status and consequently public confidence.

In Table 1, the evolution of the Greek statistical system is presented based on three main sources which are in line with Desrosières' classification of national statistical histories. The first book was published in 1932 by Kladas [11] who at the time was working as a consultant at the General Statistical Service of Greece (GSSG) and belongs to the first period of national statistical histories. The second source is an unsigned book published in 1961 by the National Statistical Service of Greece (NSSG) [15] with a forward written by the then General Director, Professor Peter T. Couvelis. The third document was published in 1971 by Houliarakis [9] who at the time was a member of the National Statistical Service of Greece (NSSG) staff. These last sources belong to the "the new wave of national statistical histories" although Houliarakis' paper uses the format of the first period of national statistical histories. Also, a brief history of the Greek statistical system is presented by the United Nations Statistics Division [26] and Eurostat [5].

As shown, the 1828 census was the first statistical work, conducted by a statistical office for which there is no information [9]. In 1834, the Bureau of Public Finances carried out statistical work. In 1863, the Department of Statistics was set up and in 1913 the Directorate of Statistics carried out statistical work. The General Statistical Service of Greece (GSSG) was founded in 1925 with a centralized structure to conduct most statistical activities. In 1956, the modernized NSSG was founded and established official statis-

Table 1
The evolution of the Greek statistical system

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Year	Statistical agency	Comments
1828	The first statistical work: census as a simple enumeration of	conducted just a year after Greece was declared as an independent
	the population	state (recognized in 1832)
1834	Bureau of Public Finances (Staatswirthschaftliches Bureau), Secretariat of the Interior	Directors: Spyros Spiliotakis (1837–1859) Ioannis Soutsos, Prof. of Political Economy, University of Athens (1860–1861)
1863	Department of Statistics, Bureau of Public Finances, Secretariat of the Interior	Director: Alexandros Mansolas (1863–1883)
1910	Department of Statistics, Ministry of National Economy	conducting the census
	Department of Statistics, Ministry of Agriculture, Commerce and Industry	compiling all other official statistics
1913	Directorate of Statistics, Ministry of National Economy and	first attempt for central organization Director: Kyriakos Var-
	Council of Statistics consisting of university professors and representatives of the Chamber's of Commerce and Industry	varesos (1919–1920), Prof. of Political Economy, University of Athens
		President of the Council of Statistics: Andreas Andreades, Prof. of Public Finances, University of Athens
1925	General Statistical Service of Greece, Ministry of National	central organization
	Economy	Directors: Ioannis Michalopoulos (1920-);
	•	Nikolaos Svoronos (acting, 1953–1954)
		decline of statistical work during the 1940s
1956	National Statistical Service of Greece (NSSG), Ministry of Co-	Director: Petros Couvelis (1955–1969), Prof. of Industrial Policy,
	ordination and later as General Secretariat, Ministry of Na-	University of Piraeus; UN experts - decline of statistical work
	tional Economy and Finance	during the dictatorship (1967–1974)
2010	Hellenic Statistical Authority	Independent authority subject to the control of the Hellenic Par-
		liament; inadequate to prevent the continuation of the debate
		about the quality of official statistics

Sources: M. Houliarakis [9], The historical evolution of official statistics in Greece (in Greek): in *Statistical Studies*, 1821–1971, National Centre for Social Research, Athens, 1972, pp. 15–112; S. Kladas [11], *Statistics in Greece* (in Greek), Apatsidis, Athens, 1932; National Statistical Service of Greece [15], *Statistics in Greece* (in Greek), Athens, 1961.

tics with the crucial contribution of the UN experts. The NSSG retained its name and close ties with bureaucracy until the economic crisis of the late 2000s. Against the background of budget problems in EU, in 2010 the government decided upon the reorganization of the NSSG as the Hellenic Statistical Authority (ELSTAT), i.e. an independent authority subject to the control of the Hellenic Parliament.

Sadly, the reorganization proved inadequate to prevent the continuation of the debate about the quality of Greek official statistics. The hastily conducted census of 2011 and the delay in publishing its results have not contributed to restoring public confidence in official statistics.

In 2013, the Good Practice Advisory Committee (GPAC) that was established under the provision of the Hellenic Statistical Law published its first annual report [8] on the implementation of Principles 1 to 6 of the European Statistics Code of Practice [6]. The re-

port [8] on the "professional independence" of the statistical agency (Principle 1), pointing out the "considerable progress in establishing ELSTAT as a professionally independent agency through a range of appropriate legal and institutional measures" and commending "in particular the comprehensive nature of the statistical legislation and the fact that Greece is the first EU country where the Government has signed a Commitment on Confidence in support of the statistical system", remarked the following:

However, it [the GPAC] is concerned that there are still a number of serious negative cultural and other factors in the wider external environment that must be addressed. The most important of these is the ongoing legal proceedings against the President and two senior officials of ELSTAT in practice. The Committee is surprised that statistical methodological decisions, which have been formally validated in accordance with EU regulations, are the subject of legal proceedings. Furthermore, the Committee is of the opinion that there is a significant political context to the proceedings and that there is therefore an urgent need for an appropriate intervention, in line with the Commitment on Confidence, by Government and/or Parliamentary leaders to de-

¹The GPAC was comprised by five members, four of which were nominated by the Hellenic Parliament, Eurostat, The European Statistical Governance Advisory Board and the European Statistical System Committee, respectively, and a representative of the Data Protection Authority. Note that the President of ELSTAT was entitled to participate on a non-voting basis [8].

Table 2
The United Nations experts working for the establishment of official statistics in Greece

Year	Phase	UN experts (type of work)
1953– 1954	Reorganization	 Jacob Perlman (organization) Louis Shapiro, Head of the UN TAP (organization) Ivor T. Uhnbom (census) Vassilios Valaoras, Prof. of Biostatistics, University of Athens (organization)
1956	Foundation	 Bengt Helger (general organization, education) G. Goudswaard, Prof. of Statistics, University of Amsterdam, consultant Netherland Statistics (statistical education) A. Reisz (ILO) (design of the first Family Budget Survey conducted in urban areas and the second conducted in semi-urban and rural areas) Sir Harry Campion, Director of the Central Statistical Office, UK (design of the FBS conducted in semi-urban and rural areas) H.E. Riley, Head of the ILO Department of Statistics (design of the FBS conducted in semi-urban and rural areas) B.N. Davies, Head of the European Economic Committee Department of Statistics (design of the FBS conducted in semi-urban and rural areas) Des Raj, Prof. of Statistics, Agra University (established probability sampling in the practice and education of the NSSG) Robert B. Pearl, Bureau of the Census (employment survey) W.H. Somermeyer (industrial statistics) Sunsho (Norway) (industrial statistics) F. Hanna, Prof. Economic Statistics (USA) (industrial statistics) G. Berggren (computers) K. Lindam (FAO) (agricultural statistics) Z. Conzalez-Ruins (occupational statistics)

Sources: C. Michalopoulou [13], In the Empire of Indications: The History of Sampling Practice in Greece, (in Greek), Papazisis, Athens, 2004; C. Michalopoulou [14], A historical appraisal of Greek sampling practices, Statistical Journal of the IAOS 29 (2013), 259–268, doi: 10.3233/SJI-130790; National Statistical Service of Greece [15], Statistics in Greece (in Greek), Athens, 1961.

fend and support the professional independence of ELSTAT and its management [8].

Note that, the report on the implementation of Principles 2 to 6 – which correspond to the FPOS 1, 4, 6 and 7 [17] – described the progress made as satisfactory and, where appropriate, solutions to the problems were recommended.

3. The United Nations experts' contribution in establishing statistical offices

In 1946, as it is well known, the United Nations organized its Statistical Office and also the Statistical Commission. Their goal was to assist in the development of national statistical systems worldwide, through the Technical Assistance Program. To this end, they sent experts to promote statistical work in developing countries. Ward [27] presented and discussed the UN's contributions to ideas and thinking on statistics. However, there is no published detailed record of the experts that worked for this program. In Table 2, a list of the United Nations experts and their contribution are briefly presented.

The contribution of the United Nations experts was crucial for the organization of the modernized statistical agency and the development of official statistics and this fact was acknowledged in the book published in 1961 by the NSSG [15] and the various publications. Michalopoulou [13,14] presented and discussed in great detail the contribution of Raj, Pearl and Goudswaard in establishing probability sampling in the practice of the NSSG and the education of its senior staff.

4. The census building the nation

Anderson [2] noted that "a history of [...] census is a crucial aspect in the study of the intellectual, political and social development of the nation". Desrosières [4] pointed out that:

The production of specific national statistics and the "ancientness" of this activity became arguments for the existence and substantiality of a nation. The case was made with occasionally surprising anachronisms. Silvana Patriarca (1996) has shown how the unification of Italy between 1820 and 1870 was supported by a proliferation of statis-

Table 3
The censuses of Greece

Year	Census	Comments
1828	Census	Simple enumeration of the general population covering central areas and the Peloponnese
1834-1856	Census	Simple enumeration of the general population: 1834–1845, 1848, 1853, 1856
1861	Census	de facto
1865	Population census of the Ionian	
	Islands	
1870	Census	de facto
1879	Census	de facto; first use of household questionnaire
1881	Population census of Thessaly and Arta	
1881	Population census of Crete	Conducted by the Provisional Administration of Crete
1889	Census	de facto
1896	Census	de facto
1900	Population census of Crete	Conducted by the Census Office of the Higher Directorate of the Interior, High Commission, State of Crete
1907	Census	de facto
1913	Population enumeration of	Macedonia, Crete, Epirus, Aegean Islands (excluding Imbros, Tenedos and the Dode-
	the new prefectures	canese)
1920	Census	de facto; covering all new prefectures: Macedonia, Crete, Epirus, Aegean Islands (including Imbros and Tenedos), Thrace and Eastern Thrace (excluding the Dodecanese)
1923	Population enumeration of	Department of Statistics, Ministries of Interior, National Economy, Hygiene, Welfare and
	Eastern Thrace or Asia Minor	Comprehension, Committee for the Settlement of Refugees
	refugees	
1928	Census	de facto; covering all areas except Eastern Thrace, Imbros and Tenedos
1940	Census	de facto; first explicit definition of household and detailed instructions for recording oc- cupation
1947	Population census of the Dode-	de facto; conducted by the Department of Population Census, Directorate of the Interior,
	canese	Military Administration of Dodecanese
1951	Census	de facto; covering entire population including the Dodecanese
1961	Census	de facto; the "ideal census" designed by the UN experts
1971	Census	de facto
1981	Census	de facto
1991	Census	de facto
2001	Census	de facto
2011	Census	de facto

Sources: M. Houliarakis [9], The historical evolution of official statistics in Greece (in Greek): in *Statistical Studies*, 1821–1971, National Centre for Social Research, Athens, 1972, pp. 15–112; M. Houliarakis [10], *The Questionnaire of the Population Census in Modern Greece* (in Greek), Athens, 1975; S. Kladas [11], *Statistics in Greece* (in Greek), Apatsidis, Athens, 1932; National Statistical Service of Greece [15], *Statistics in Greece* (in Greek), Athens, 1961.

tical undertakings that literally put the new nation on display. In this case, it is clear that statistics do not merely "reflect" national reality but also "establish" it, in the same way as a constitution, national holidays, anthems, flags, school textbooks, and historical monuments. As regards statistics, the founding political act is not only the exhibition of a number (preferably a big one) such as the size of the population – or, later, the gross "national" product – but the equivalence convention that makes enumeration and addition possible. The link between democracy (one man, one vote) and statistics is attested by the fact that statistics was promoted in Risorgimento, Italy, by liberals hostile to the old monarchies. A nation is not only a political unified space, but also a common cognitive space, observed and described through consistent interpretative frameworks. The negative demonstration of this is the long, costly, and often conflict-ridden effort by the European Union Member States to "harmonize" their statistical systems; that is, to achieve a convergence between equivalence conventions that are dissimilar because of their often utterly different historical origins.

In Table 3, a brief history of the Greek census is presented. As shown, in line with Patriarca [16], the annexation of new territories from 1865 to 1928 and 1947 was immediately followed by census activities carried out by various bodies. The 1951 and subsequent censuses cover the entire population as we know it.

In 1958, the United Nations Statistical Commission [21] issued the first set of principles and recommendations for the national population censuses pertaining to all aspects of their design, organization, eval-

uation and implementation so as to provide data comparable cross-nationally, within nation and over time. Also, the importance of the census as a frame for designing random samples was remarked and the application of random sampling techniques for carrying out tests, post-enumeration checks and quality control of the census as well as implementing a sample survey when a census was not feasible were recommended [21]. Recently, there is a discussion on ending the census activity [3,20] and this is feasible for countries with developed statistical systems. However, for countries like Greece with less developed statistical systems, the census is very important in providing the frame for designing random samples.

5. Summary

The history of the developed statistical systems teaches us that it took the combined efforts of government statisticians and statistical organizations to "achieve and maintain a strong position of independence from the appearance and reality of political control – to be credible and unhindered in its mission, a statistical agency must maintain a widely acknowledged position of independence from undue external influence" – as the fourth principle of the *Principles and Practices for a Federal Statistical Agency* fifth edition states [1]. In the case of Greece, the journey towards "statistical" independence is only of five years duration but it is of the utmost importance for the development of official statistics that it is taking place.

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