

Chapter 2

Harmonising Data in Official Statistics¹

Development, Procedures, and Data Quality

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1. INTRODUCTION

Statisticians understand the term ‘harmonisation’ to mean the creation of a desired degree of comparability between statistics of different countries. Comparability is a quality criterion, meaning that it is one of many product properties striven for in drawing up statistics. Comparability may refer both to comparing statistics at different times, as well as to spatial comparison between sets of statistics across a number of regions, nations, *etc.*

Harmonisation by no means only signifies subsequent adaptation of existing data to the numbers existing in other countries. This harmonisation process – ‘creation’ of comparability – is frequently carried out when planning surveys. Here, harmonisation may be highly extensive in nature, and for instance may go as far as standardising specific questions in the countries’ questionnaires.

Irrespective of whether the goal is the extensive adaptation of the whole survey procedure, or merely the subsequent adaptation of existing national results, the first step taken in a process of harmonisation always consists of determining a universal reference concept to which the national statistics are to be adapted. In this instance, the term ‘concept’ comprehensively covers all

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the definitions, classifications, *etc.*, needed in order to operationalise an abstract question, and therefore to make it measurable. One might say that the concept is the language in which the desired value is defined for which a country comparison is to be created. An 'international concept' in this context must be sufficiently universal that the particularities of all the participating countries can be collated and adequately categorised.

Statisticians turn their attention to the characteristics of 'institutions', as well as to the 'activities and functions' carried out by these institutions. The institutions, be they enterprises, households or state facilities, are frequently labelled here in terms of their own national structures, and hence can be difficult to compare at international level. The national structures are based on highly specific historical, geographical, legal, social or political circumstances. In order to create comparability, universal concepts must therefore be orientated with reference to activities and functions. One method is, where possible, to isolate the characteristic that is interesting in an international comparison from its institutional context. This may however lead to a situation in which the results lose their concrete authoritativeness, and in an extreme case may measure only an abstract value with virtually no practical benefit.

On the other hand, international comparison entails the danger of surveys being adapted to institutional circumstances, in spite of major differences, in order to avoid a high degree of abstraction. It is however possible in these cases, owing to the structural particularities of the individual countries, that totally different circumstances are being measured which are not actually comparable.

These potential difficulties which arise in defining an international concept may be summarised under the term 'adequation problem'. Because of problems in adequation, a harmonisation process must in many cases follow a very profound approach, where first of all the question is asked as to what precisely is to be measured, and how the respective political or academic question can be implemented in an international framework. This is the only way to ascertain whether harmonisation is possible at all and how it can be efficiently implemented.

2. DEVELOPMENT OF STATISTICS HARMONISATION

It is possible to distinguish between different phases in past trends in the harmonisation efforts in Europe.

2.1 Early Academic Approaches to Harmonisation

The genesis of the harmonisation process probably coincided with the development of a more profound academic approach towards statistical research, which started in the second half of the nineteenth Century. Thus, the International Statistical Institute was established in The Hague in 1885, an academic society aiming to promote progress in official and academic statistics. A main activity of the institute is still to standardise and harmonise statistical data. However, in its recommendations on the harmonisation of country-related statistics to achieve easier international comparability, the institute can only build on its academic authority, having no direct influence on statistical offices (Ehling 1996: 415).

2.2 Collection of Data from Various Nations

The consistent creation of international statistics was given an impetus around the turn of the century from the 19th to the 20th century by virtue of the establishment of international institutes and organisations which in addition to their actual tasks also collected statistical material. Examples are the International Labour Office, created in 1901, the International Agricultural Institute, founded in 1905, and the International Health Office, set up in 1907 (Ehling 1996: 415). The statistical work of the League of Nations, which was largely taken over by the United Nations after its dissolution in 1946, were also of considerable significance (Jacobi 1953: 193). The United Nations Statistics Division, under the aegis of the Secretary-General, is concerned with the collection and publication of statistical material from the various states.

2.3 Voluntary Obligations Undertaken by National Official Statistics

Because the discrepancies between the statistics of the different states became evident in the course of this collection of statistics from various countries, as well as in comparative evaluation, this realisation paved the way for processes to approximate the country results – in other words for the actual harmonisation processes. This led to the creation of an area of opera-

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