

# International Statistical Comparisons - Ex-ante or Ex-post Harmonisation?

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## 1. International comparability is necessary

One of the key features of modern information infrastructures is their international dimension. Setting up such structures runs parallel to the internationalisation of economic activity and to the globalisation of business strategies. We have to bear this in mind for our statistical activities. As a precondition for joint international work in statistics, it is necessary to set generally accepted international standards. However, that alone will not suffice. What can we do to achieve international comparability of data that have been produced at the national level?

## 2. What are the options?

In methodological terms, the following approaches may be considered:

- ex-ante harmonisation (variant 1: developing and introducing entirely harmonised surveys or survey parts; variant 2: adjusting individual survey characteristics of existing national statistics)
- ex-post harmonisation (adjusting the results already available from national statistics).

All three approaches are feasible. There are a number of reasons supporting the latter choice.

Applying the method of harmonised surveys means trying to completely coordinate the statistical systems. The data should be produced using the same methods already at the stage of data collection. The production processes should use the same inputs. Inputs are definitions, nomenclatures, methodological specifications, the same rules for data processing, the same forms of presentation. This approach is based on the assumption that products which are produced with the same production processes and the same production factors (inputs) will have the same outputs.

The second variant of ex-ante harmonisation is somewhat less radical. It does not attempt to harmonise the entire production process but tries to introduce into the relevant statistics only specific survey characteristics in an internationally comparable form.

The assumption underlying ex-post harmonisation is quite different. That method tries to make the differing statistical results comparable through changes, adjustments and revisions after the results have been produced. So, its starting point is at, or after the end of the production process. That approach is based on the assumption that it is an illusion to think that national statistical systems can be harmonised.

## 3. The world has more than one reality

What we try to do by our national statistics is to describe the national realities in quantitative terms as appropriately as possible. Those realities are economic, social, educational or health systems and structures. We all know that such systems are highly different all over the world.

The following examples may illustrate the problems of ex-ante harmonisation.

Example 1: How can we measure *monetary values* in a way as to make the measurement comparable at an international level? Generally, the national units of measurement are monetary units in the national currencies. How can we make such values comparable internationally? The values may be converted into a key currency (e.g. in US \$). This involves the problem of currency fluctuations. Comparability may also be achieved by conversion into purchasing power parities. What really determines the method to be applied is the goal or the purpose of the comparison, which means result-orientation; so, we have an ex-post approach.

Example 2: How do we measure the *economic performance of a national economy*? What sectors are included? The UN concept of national accounts (SNA) is based on the situation in modern industrialised countries. Economic structures such as those existing in many developing countries are not adequately covered. National economies with a high degree of self-service economy cannot adequately be represented with those concepts. Time use studies performed in industrialised nations have shown that a considerable part of "value added" is produced through own-account production outside the market. The same is true of developing countries. However, the economic importance of the self-service economy is much greater in developing countries. Consequently, that part of an economy should be covered according to its actual importance.

Example 3: *Measuring unemployment.* What is the information value of unemployment rates measured in an internationally comparable way in accordance with the ILO concept? Unemployment cannot be compared without taking account of the social security systems. Unemployment rates can show just the absolute level and development over time within a specific national economy. When compared across nations, such figures are not very informative. What is the impact of unemployment on the absolute and relative incomes of the families concerned? What is the connection between unemployment and absolute or relative poverty?

Example 4: *Education statistics.* Educational systems differ considerably. For instance, what is the share of persons of the same age that have obtained a university degree? It is difficult to compare that share across countries. University degrees can differ considerably between countries. Many qualifications supposed to be comparable are not recognised by other countries. The underlying reasons cannot be eliminated through ex-ante harmonisation of statistics. Such differences cannot be made disappear by shaping statistical definitions and nomenclatures accordingly. What might be attempted in view of the existing differences is ex-post harmonisation of the data. The same is true of vocational training.

#### **4. Realistic methods aimed at international comparability**

The more similar or the more comparable social or economic systems are, the more realistic is it to achieve a comparable representation of such systems through ex-ante harmonisation of statistics. In international comparisons, this is very seldom the case. Activities aimed at an international comparability of statistics should focus on methods of ex-post harmonisation. Ex-ante harmonisation of statistics involves the risk of creating the illusion of comparability where there is no real comparability.

**RÉSUMÉ:** L'exposé montre, à l'aide d'exemples, que la comparabilité internationale des statistiques ne peut généralement être assurée par l'harmonisation de la totalité ou de certaines parties du processus de production (ex ante). Cette impossibilité résulte essentiellement du fait que les réalités décrites par les statistiques (systèmes, structures) diffèrent considérablement d'un pays à l'autre. Les statistiques ne peuvent éliminer ces différences, ni les gommer par des artifices définitionnels. Aussi une comparaison statistique n'est-elle souvent possible que quand les résultats nationaux ont été rendus comparables a posteriori (ex post).