EU Statistics on Income and Living Conditions (EU-SILC): issues in comparability and data quality

Vijay Verma
University of Siena

ABSTRACT

This overview paper develops a framework for the assessment of comparability in EU-SILC. We view data quality as a multidimensional concept, covering not only statistical accuracy but also the relevance, timeliness, comprehensiveness, etc., of the data. Comparability is one of the dimensions of data quality, a dimension particularly important in the context of a EU-wide undertaking such as EU-SILC. In ECHP, for instance, comparability was achieved through a standardised design and common technical and implementation procedures, with centralised support of the national surveys by Eurostat. The survey structure and implementation arrangements are more diverse in EU-SILC; the paper identifies how this diversity makes the problem of comparability more complex and acute in EU-SILC.

We begin by clarifying what "comparability" means and how it may be achieved in practice, and identify the basic characteristics and requirements of EU-SILC in their effect on comparability. Comparability means the extent to which the results for different countries can be put together, compared, and interpreted in relation to each other and against common standards. An assessment of how far such comparability has been achieved in practice requires us to examine the data and procedures both from the "input" and the "output" sides. The former involves an analysis of the methodology and implementation of the process of production: how the data were collected, statistically treated, processed, and analysed. The latter involves a comparison of the substantive results actually obtained with appropriate standards such as alternative data sources, prior knowledge, and logical expectations. Both these aspects in the assessment of comparability are important.

On the basis of this framework, the paper proceeds to identify a number of specific aspects where problems of comparability are likely to arise in EU-SILC, and elaborates methodologies for the study of some of the more important ones among them.
1 Data quality: a multidimensional concept

This overview paper develops a framework for the assessment of comparability in EU-SILC. We view data quality as a multidimensional concept. Comparability is one of the dimensions of data quality, a dimension particularly important in the context of a EU-wide undertaking such as EU-SILC. The survey structure and implementation arrangements are more diverse in EU-SILC, compared with ECHP for instance. This paper identifies how this diversity makes the problem of comparability more complex and acute in EU-SILC.

We begin by clarifying what "comparability" means and how it may be achieved in practice, and identify the basic characteristics and requirements of EU-SILC in their effect on comparability. Based on this framework, we identify a number of specific aspects where problems of comparability are likely to arise in EU-SILC, and elaborates methodologies for the study of some of the more important ones among them.

A comprehensive assessment of data quality requires its diverse dimensions to be taken into account. Various organisations have developed their own specific lists of 'quality dimensions', but they all have a great deal in common. Commonly, the concept of data quality includes aspects such as:

1 Relevance and use of the data

actual use of the data, but also including scope and structure of the information collected, and other characteristics such as comparability, multi-dimensional coverage, longitudinal measurement, etc., determining potential uses of the data

2 Accessibility and clarity

this includes conditions of accessibility, forms of dissemination, technical documentation, information services provided

3 Timeliness

data release in the required form, judged against pre-specified standards of timing

4 COMPARABILITY

increasingly a most central requirement; in a multi-country undertaking such as EU-SILC issues of comparability underscore all aspects of data quality

5 Data accuracy

errors of measurement, and errors of estimation

- coverage, non-response, response and processing errors; sampling error,

6 Coherence with other statistics

7 Coherence over time

To a certain extent, the different dimensions of data quality compete against each other, an obvious example being the common conflict between timeliness and data accuracy – “quickly released but rough data, versus refined data but much delayed”. And of course, statistically most accurate data are not necessarily the most comparable.

But, even more importantly, different aspects of data quality are also mutually support and reinforce each other, one often forming the precondition for the other. For instance, it is hardly possible for two data sets to be comparable, when either or both lack statistical accuracy.
### 2 Comparability: a central requirement

Comparability is increasingly becoming one of the central dimensions of data quality. It is particularly important in the context of a EU-wide undertaking such as EU-SILC. The need for genuinely comparable data arises not only because it is important in itself but because such data give Member States and the EU the possibility of benchmarking and defining best practices in terms of social and economic policy. Apart from its obvious relevance at the EU level, comparable information is also very valuable for policy at the national level, as it helps each country to judge its place relative to others in the EU.

To begin with, it is useful to explain the concept of 'comparability': (1) what comparability is; (2) how comparability may be achieved in practice, and the role of standardisation; and (3) as to how we may assess the extent to which comparability has or has not been achieved. This defines the framework for understanding and evaluating the performance of EU-SILC in this respect.

Diverse issues concerning comparability have been discussed in-depth by the current author, and these will provide a framework for the present discussion.

### What is comparability

*Comparability of statistical data*, i.e. their usefulness in drawing comparisons and contrast among different populations, is a complex concept, difficult to assess in precise or absolute terms, independently of specific objectives of analysis. Nevertheless, it is a fundamental requirement for any data to be used in multi-population comparisons and contrasts, and is the major rationale in the launching surveys such as the ECHP and EU-SILC.

While comparability may defy precise definition, it is an important and useful concept. It is a relative concept: we can only have 'degrees of comparability', not absolute

---

1 See for instance:


Verma V. (2002). *Pilot Experiment first EU synthesis-Overview of coverage and content of the questionnaires*. EU-SILC Doc 95/02, meeting of the task force, Statistics on Income and Living Conditions (EU-SILC), 05/06 September 2002, Eurostat, Luxembourg. (This extensive report examines the national questionnaires used in the various Member States for EU-SILC project for completeness and comparability, and makes recommendations to Eurostat for improvement of the survey instruments.)


V. Verma also contributed extensively to Eurostat document "The European Community Household Panel (ECHP): Quality Report", and to "EU-SILC Pilot: Comparison of Country Questionnaires" (document EU-SILC 95/02; revised March 2003)
comparability. By comparability we mean that data (estimates) for different populations (whether countries or different groups within the same country) can be legitimately (i.e. in a statistically valid way) put together (aggregated), compared (differenced), and interpreted (given meaning) in relation to each other and against some common standards. The results for these subpopulations have to be (1) aggregated to construct the total picture; (2) have to be contrasted to study differentiation; and (3) even for individual subpopulations, meaningful interpretation can only be given on the basis of shared concepts, definitions and classifications. A degree of comparability is the essential basis for all these three operations.

Why comparability?
Comparable information is needed because of the:
- countries' need to assess their place in relation to other countries.
- increased scope for learning from others' practices and join in co-operative ventures.
- data needs of international and bilateral aid agencies for their programmes and policies.
- advantages to countries of financial and technical support from international programmes
- the researchers increasingly looking for internationally comparable datasets.

How comparability is achieved
In relation to the basic requirements for generating comparable data, a distinction can be drawn between the measurement and estimation aspects of a data generation system.

Measurement aspects. These concern obtaining information on the given set of units in the study, such as households and persons. These include definition of concepts, variables and survey population; methods of measurement and data collection; and the related substantive analysis. These should be strictly standardised so as to control (make similar) biases of measurement in the comparisons.

Estimation aspects. These concern drawing conclusions about the population which the observed units are meant to represent. These include sampling frames, sample size and design, many operational aspects, as well as weighting, estimation and other aspects of statistical analysis. Generally, these have to be chosen flexibly to suit the conditions and requirements of individual populations in the comparison. What is required is not identical procedures, but the common standards to be followed.

Comparability requires control of the measurement aspects so as to ensure that the same type of information is obtained. In principle, the estimation aspects can be chosen flexibly without affecting comparability, as long as valid and common standards are followed.

Standardisation
In addition, there are in practice often powerful reasons for aiming at standardisation and control of many details in surveys aiming at generating comparable data, going well beyond the development and provision of common concepts, definitions, survey instruments, and the main statistical outputs. This is especially useful when existing technical capability of individual organisations in the co-operation varies and is inadequate in some. Standardisation is a useful tool for ensuring that conditions for comparability are actually met. There is often also a considerable economy of effort in adopting a uniform package of procedures for data collection, processing and analysis, in contrast to custom-design for each case.
3 Inter-country comparability of EU-SILC data

Lessons from ECHP

A comparison with the situation of ECHP is very instructive in appreciating the issues as they are likely to arise in EU-SILC.

In ECHP comparability was achieved through a standardised design and common technical and implementation procedures, with centralised support and co-ordination of the national surveys by Eurostat. This included: (1) common concepts, definitions and classifications; (2) the use of a common 'blue-print' questionnaire, which served as the point of departure for the national surveys; (3) a common survey structure and procedures; (4) common sampling requirements and standards, coupled with flexibility in the actual designs to suit national conditions; (5) common standards and arrangements for data processing and statistical analysis; (6) the creation of standardised microdata sets - this was a crucial element of data comparability in practice; and (7) the above achieved in practice through centralised support and co-ordination of the national surveys by Eurostat.

Concerning (5), common standards and arrangements for data processing and statistical analysis, we should comment on two important aspects, namely imputation and weighting.

Imputation for missing income components: Imputations were confined to missing income components and are done centrally by Eurostat. For this purpose a comprehensive methodology was adopted, following discussions at the ECHP Working Group and a Task Force constituted for the purpose. The method used was a variant of the estimation-maximisation (EM) algorithm, with the algorithm and programs developed at the University of Michigan. Imputations were performed for components at an intermediate level of aggregation, rather than at the level of detail enumerated in the questionnaire.

Sample weights: Standard procedures were developed and implemented for the computation of sample weights, generally again centrally at Eurostat. Starting from wave 2 weights were developed on the basis of Wave 1 weights, modified to take into account unit non-response between the waves and adjustment of the achieved sample to external control distributions by basic person and household characteristics.

Of course, there were limitations to comparability across countries in ECHP data. Nevertheless, each of the features (1)-(7) contributed much to the achievement of a fairly high degree of comparability across countries.

In order to adequately address the comparability issues, it is necessary to identify how differences between the EU-SILC and ECHP structure and arrangements make the problem of comparability more complex and acute in EU-SILC. For this purpose it is necessary to begin by clarifying the basic characteristics and requirements of EU-SILC in their effect on comparability.

Characteristics and requirements of EU-SILC affecting comparability

Flexibility is an essential feature of EU-SILC. This means that EU-SILC dataset may comprise different types and combinations of data sources, with different designs.

Cross-sectional and longitudinal components

Data are required in both cross-sectional and longitudinal dimensions. Both cross-sectional and longitudinal micro-data sets need to be updated on an annual basis.
The first priority is given to the production of comparable, timely and high quality cross-sectional data. The cross-sectional component covers information pertaining to the current and a recent period such as the preceding calendar year. It aims to provide estimates of cross-sectional levels as well as estimates of net change from one period (year) to another.

The longitudinal component covers information compiled or collected through repeated enumeration of individual units, and then linked over time at the micro-level. It aims at measuring gross (micro-level) change and elucidating the dynamic processes of social exclusion and poverty. Longitudinal data are to be limited to income information and a limited set of critical qualitative, non-monetary variables of deprivation, aimed at identifying the incidence and dynamic processes of persistence of poverty and social exclusion among subgroups in the population. The longitudinal component is also be more limited in sample size. Furthermore, for any given set of individuals, micro-level changes needs to be followed up only for a limited duration, such as a period of three to four years.

**Diverse data sources**

The cross-sectional and longitudinal data can come from separate sources, i.e., the longitudinal dataset does not need to be “linkable” with the cross-sectional dataset at the micro-level. Of course, such linkage is normally present in so far as the two types of data come from the same source. In principle, depending on the country, micro-data could come from:

(1) one existing national source (survey or register);  
(2) two or more existing national sources (surveys and/or registers) directly linkable at micro-level;  
(3) one or more existing national sources combined with a new survey – all of them directly linkable at micro-level;  
(4) a new harmonised survey (termed an 'integrated survey') to meet all EU-SILC requirements.

We understand that the integrated survey is the most common option adopted. This is because a majority of the countries are starting new surveys for EU-SILC.

**Varied structures**

Flexibility of EU-SILC means that EU-SILC dataset may comprise different types and combinations of data sources, with different designs. A typology has been developed of the structure and design of EU-SILC data sources, describing in particular aspects pertaining to sampling. It identifies the following possibilities:

[A] a single integrated source covering all components – cross-sectional and longitudinal, income and social; or  
[B] two separate surveys, one cross-sectional and the other longitudinal, each covering both income and social (non-income) variables; or  
[C] two separate sources, one covering income variables and the other covering social variables, both cross-sectional and longitudinal in each case.

It notes two other possible arrangements, though likely to be rare:

[D] a single ECHP-type panel survey, providing all cross-sectional and longitudinal data, but primarily focused on the latter; or

---

More complex structure(s)

In practice, it appears that the most commonly used design is the integrated design, [A], as it is generally the most suitable one, at least for countries starting a new EU-SILC survey. In this design, the cross-sectional sample at any year consists of four panels, one having been introduced afresh that year, and the others introduced, respectively, 1, 2 and 3 years ago. Clearly, this structure is more complex than ECHP. At any one time, panels of different ages constitute the total sample, which is likely to increase the complexity of both the cross-sectional and the longitudinal weighting procedures.

Another major source of complexity (and also diversity) arises from the choice between using a sample of ‘complete’ households (i.e., taking all members of a selected household into the sample), and using a sample of persons (essentially, selecting only one adult per household for the survey). This choice applies only to surveys aimed at collecting more complex non-income variables in countries where income information can be obtained from registers. Procedures need to be developed also for such samples of persons.

Income and social variables

In relation to the required survey structure the data covered in EU-SILC can be classified into the following types, for both the cross-sectional and the longitudinal components:

- ‘household variables’: covering variables measured at the household level; including also household member variables providing information on basic characteristics of household members
- ‘income variables’: this covers the set of target variables on income, income sources and related aspects; these are relatively complex variables measured at the personal level, but aggregated to construct household-level variables; and
- ‘social variables’: this covers a range of target variables on living conditions, activity, attitudes and other non-monetary indicators, and may also include some closely related income variables; these are relatively complex variables collected and analysed at the person-level.

Variables concerning the household and household members include mainly straightforward items, collected or compiled at the household level. The information may come from an interview survey with a single respondent in the household, from registers and other administrative sources, or from some combination of the above. These sets of variables require the same type of survey structure in all countries: a representative sample of households covering all their members.

The choices concerning income and social variables are more complex and inter-related. Income variables must be obtained for a sample of complete households, i.e. covering all income recipients (adults aged 16+) in each household. The information is too complex to be obtained by proxy, and must either: (i) be collected through personal interview with all adults in the sample households; or (ii) compiled from registers, thus replacing the interview survey altogether for these variables.

Social variables are also too complex or personal in nature to be collected by proxy. However, in contrast to income variables, these are generally not available from registers or other administrative sources, and must be collected through direct personal interview. Another crucial difference is that, from the substantive requirements of EU-SILC, it is not essential that these variables be collected for all persons in each sample household. It
is possible to do this collection on a representative sample of persons (adult members aged 16+), such as by selecting one such person per sample household. Hence within EU-SILC objectives, the choice is between covering this set of variables: (i) on a sample of complete households, i.e. covering all adult members of each sample household; or (ii) on a subsample of adults, such as by selecting one adult per sample household.

In practice, the choice would depend on the source of information for income variables. The normal choice would be to collect social variables on a sample of complete households if income variables are collected through personal interview, since the latter would then already involve detailed interviewing of all adults in the household. However, where income data are obtained from registers and involve no personal interviewing, it may often be considered more convenient and economical to collect social variables from a subsample, such as one adult per sample household.

**Expanded coverage**

In addition to all the above factors, the problems of comparability are made more complex and acute in EU-SILC simply as a result of the fact that more diverse conditions are to be covered. While ECHP was confined to the old EU15, EU-SILC covers the expanded EU25, and possibly also Norway, Iceland, Switzerland, and the Candidate countries including Bulgaria, Romania, Croatia and Turkey. Survey instruments and procedures have to be adapted such that comparable data are produced despite major differences in the prevailing structures and circumstances of the countries involved.
4 Assessment of achieved comparability

How may we assess the extent to which comparability has or has not been achieved across countries in the implementation of EU-SILC?

As noted, comparability is a complex concept and not easy to quantify. In order to assess the degree to which different bodies of data are 'comparable', it is necessary to examine them both from the "input" side and from the "output" side.

- By examination from the input side, we mean an analysis of the methodology and implementation of the process of production of the data sets. From where and how the data were collected, statistically treated, processed, and analysed?

- By examination from the output side, we mean a comparison of the substantive results actually obtained, with reference to appropriate standards such as alternative data sources, prior knowledge, logical expectations, etc. How meaningful are the substantive results being compared in relation to each other and to appropriate external standards? How far can the estimates for different countries be put together, compared, and interpreted in relation to each other and against some common standards?

Both these aspects in the assessment are important, and must be taken into account in the implementation of the comparability assessment process.

Comparison of the production processes

1. A thorough examination of similarities and differences in the methodology of the production process of the data can provide very reliable indicators of the degree of comparability which may be expected. Even more strongly, it can indicate where the results are most likely to lack the required degree of comparability.

2. Frequently, reliable comparisons from the "output" side are simply not possible, and methodological comparisons from the "input" side is all that can be achieved.

3. Two important points need to be kept in view in comparisons of the data production methodologies. One is the distinction noted above between the measurement aspects which need to be the same or comparable, and the estimation aspects which can be chosen flexibly without affecting comparability. (There are many examples of confusion arising as a result of unnecessarily requiring standardisation of the estimation aspects as well.)

4. Secondly, it should be noted that sometimes even the measurement aspects need to be different to obtain comparable results. A good illustration of this point is provided by the use of country-specific questionnaires to obtain the required information, as opposed to the use of common 'blue-print' questionnaires in all countries. Of course, a common questionnaire can ensure a common operationalisation of the concepts and content for the surveys. However, the requirement of comparability of the information generated does not necessarily imply the need to use identical questionnaires in all countries. On the contrary, because of differing legal and institutional frameworks, different questions are sometimes required in different countries to obtain the same information. An example is the enumeration of income from the diverse social protection schemes in different countries.

5. Hence it is important to compare EU-SILC data production methodologies among countries in a context-sensitive manner, rather than mechanically. Also, account must be taken not only of formal differences, but of actual differences in the implementation. (Real differences can be much more important than differences in the formal procedures adopted; the converse is also possible –
Formal procedural differences having little consequence in their actual implementation.

**Comparison of the substantive results**

1. In principle, it is the comparison of the substantive results actually obtained (the "output") which is of interest in the assessment of comparability. Sometimes, comparisons from the "input" side may point to differences which appear serious, but the effect of which on the actual results obtained turns out to be unimportant. Equally, comparisons from the "input" side may fail to identify differences, which in fact damage the comparability achieved in significant ways.

2. However, direct comparison of the substantive results is sometimes too difficult or even impossible. Hence it must be complemented by comparison from the "input" side.

3. For the same reason, it is often necessary to look for relatively large differences, for patterns which appear implausible in the light of all the available information. The dividing line as to which differences are "large" to a considerable extent is a matter of the analyst's judgement.

4. In any case, to be of interest in the evaluation of comparability, the observed differences should be significantly larger than sampling and non-sampling errors involved in both the sources, and also larger than the differences between them expected on the basis of existing knowledge.

5. Hence, comparisons of the substantive results is also not a mechanical task. Researchers would need to use their analytical skills and subject-matter specific knowledge in this exercise.
5  A review of potential sources of non-comparability in EU-SILC

In this section we try to identify a number of specific aspects where problems of comparability are likely to arise, or where at least an investigation is called for.

This is a tentative list of sources of non-comparability, and obviously may be modified or extended as a result of further study and feedback from those implementing EU-SILC.

Some potential sources of non-comparability in EU-SILC

1. Detailed analysis of the comparability of income distribution by component, with particular attention paid to imputed rent and to housing costs in general, and to sources of non-monetary income.3

2. Differences in how income taxes are treated; assessment of the impact on comparability of the Gross-Net conversion procedures used in different countries: to understand the procedures used; examine how they fit into the Eurostat general micro-simulation model SM2; apply SM2 to check and replicate the gross-net conversion.4

3. Effect on comparability of the choice between annual vs. current income concepts.5

4. Study of comparability of non-income items defining living conditions, deprivation and social exclusion: examining in particular the type of supplementary variables developed in Eurostat Social Report on income poverty and social exclusion.6

5. Comparability of basic concepts for data collection and analysis, such as definition of the household, reference person, sample person, actual tracing rules used, etc.7

---

3 Relevant references on this topic include the following:


4 An essential reference to this is the following:

Eurostat (2004). Income in EU-SILC: Net-Gross-Net Conversion; Common Structure of the Model; Model Description; and Application to ECHP Data for France, Italy and Spain. Doc. EU-SILC 133/04, with the contribution of V. Verma, G. Betti, F. Ballini, M. Natilli and S. Galgani. This provides a comprehensive description of the Siena Micro Simulation Model (SM2) and its application for the conversion of household and personal income data collected in diverse forms in different Member States under EU-SILC project, to the standard target variables on gross and net income required at the EU level.

See also:


See also:

COMMISSION REGULATION (EC) No 1983/2003 of 7 November 2003 concerning EU-SILC as regards the list of target primary variables.
6. Analysis of major differences in structure of the SILC instrument: fundamental difference between (i) use of registers for income, and sample of persons for complex social variables; (ii) income from survey, and household sample for complex social variables.8

7. Examination of national variations in the relationship between longitudinal and cross-sectional components of EU-SILC; the effect of each on the other; consistency (or lack of it) between the results from the two components and its effect on comparability.

8. Documentation of the variations in modes of data collection (for instance, the use of CAPI, CATI, PAPI, etc.; different fieldwork and interviewing procedures), and a study of their impact on data comparability.

9. Comparability of the national questionnaires: an overview of and commentary on coverage and content of the national questionnaires.9

10. Effect of different rates of cross-sectional non-response, and different attrition rates of the panel components. As in the case of the ECHP, different countries may achieve very different response rates. The problem may be smaller in EU-SILC because of the limited duration of its panels. On the other hand, the overall impact on comparability may be increased due to very different data collection situations between countries using registers and countries using the survey instrument for the collection of income data.

11. Comparability of imputation procedures: Eurostat had developed an elaborate procedure for the imputation of missing items on income in ECHP; in principle, similar procedures have been recommended for EU-SILC.10 However, it is expected that generally the detailed procedures will be developed and implemented at the country level. This raises the issue of comparability of the results of imputations.

12. Study of differences in the weighting procedures used, and an assessment of the effects of such differences on comparability of the results. (As such, comparability does not require identical weighting procedures, but it is essential to have common standards.)

---


9 These aspects are examined in some detail in:

See also:
COMMISSION REGULATION (EC) No 1982/2003 of 21 October 2003 concerning EU-SILC as regards the sampling and tracing rules

9 Verma V. (2002). Pilot Experiment first EU synthesis-Overview of coverage and content of the questionnaires. EU-SILC Doc 95/02, meeting of the task force, Statistics on Income and Living Conditions (EU-SILC), 05/06 September 2002, Eurostat, Luxembourg. This is an extensive report examining the national questionnaires used in the various Member States for EU-SILC project for completeness and comparability, and makes recommendations to Eurostat for improvement of the survey instruments.

10 For the description of the fundamental requirements, see COMMISSION REGULATION (EC) No 1981/2003 of 21 October 2003 concerning EU-SILC as regards the fieldwork aspects and the imputation procedures.

See also:
13. Comparability of the incidence of and the treatment of negative, zero and small values of the total disposable household income.

It is possible to identify many other topics of interest in the study and assessment of comparability in EU-SILC data. One will begin from the development a comprehensive framework for such analysis and assessment. Then on that basis, individual sources of non-comparability can be examined in a systematic and consistent way.

An example of studies on comparability.
Analysis of the comparability of income distribution by component

EU-SILC has to deal with the fact that income of households is made up of diverse components received by multiple individuals. Its elements may be compiled from different types of sources, which may differ in concepts and definitions and may not refer to exactly the same reference time. The different sources may be subject to differing patterns of response and recording errors, sampling errors, inconsistencies and incompleteness etc. All this affects comparability.

This assessment would require detailed analysis of the comparability of income distribution by component. Particular attention would need to be paid to (1) imputed rent; (2) housing costs in general; and (3) to sources of non-monetary income. Another related issue is the effect on comparability of the choice between the annual income and the current income concepts, though the latter has been used only rarely in EU-SILC (Ireland; possibly the UK).

Recommended definition of income for use in EU Member States specifies that gross income should include all regular receipts such as wages and salaries, income from self-employment, interest and dividends from invested funds, pensions or other regular receipts from social protection schemes, and any other current transfers received in cash which are regular rather than one-time. Income should not include any large, one-time or irregular receipts from inheritances and the like, which should be regarded as capital transfers since they are unlikely to be spent immediately upon receipt.

The EU income concept – definition

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employee income</td>
</tr>
<tr>
<td>2</td>
<td>Income from self-employment</td>
</tr>
<tr>
<td>3</td>
<td>Imputed rent of owner-occupiers and others</td>
</tr>
<tr>
<td>4</td>
<td>Property income</td>
</tr>
<tr>
<td>5</td>
<td>Current transfers received</td>
</tr>
<tr>
<td>6</td>
<td>Interest payments</td>
</tr>
<tr>
<td>7</td>
<td>Current transfers paid</td>
</tr>
</tbody>
</table>

Gross income (1+2+3+4+5 less 6)

Disposable income (1+2+3+4+5) less (6+7)

Possibilities
1. Perhaps the main issue here for problems of non-comparability is the different classification that is made by Member States in defining different sources of income; this problems also occurs when we consider information from Registers.

11 Based on Table 2.1 of EU-SILC Income Manual
Even if the disaggregation of income by components in registers is very precise or detailed, this is not necessarily exactly the same as other registers in other countries, or the same as recommended by the EU-SILC Income Manual, or the same as implemented in interview surveys.

This problem of classification could be more problematic when further disaggregating the major income components listed in the table above. More detailed are the income components, the lower is the degree of expected comparability among the countries.

Assessment of comparability would require one to carefully study the concept defined by each Member State and compare the income distribution by component in order to identify the main sources of non-comparability.

2. At a later stage, EU-SILC will include imputed rent of owner-occupied or rent-free dwelling as a target variable, and as a component to be included in the total disposable income. This is a major component and can change the relative situation of countries differing greatly in the proportion among households living in owned or rent-free accommodation. Excluding this components damages comparability. But on the other hand, its inclusion can also introduce lack of comparability, which may arise from the use of different procedures for imputing rent. While Eurostat may recommend particular procedures (or a strategy) for the purpose, individual countries may not be willing to – and what is more likely, may not be able to – use identical procedures.

3. A related issue is the assessment of housing costs. EU-SILC is not concerned with consumption patterns, but the importance of housing costs in the analysis of income arises from the presence of housing assistance as an important component of income. Increases in housing assistance may simply reflect increases in housing costs (such as increased rent of accommodation provided by public authorities), rather than a real difference in the level of living of the concerned household. The significance of the issue varies from one country to another, making it a source of non-comparability.

4. Income-in-kind can only be covered partially in any income survey. Furthermore, EU-SILC begins with a restricted coverage for practical reasons: including only some main and feasible components such as private use of the "company car". It is expected that the importance of income-in-kind – in particular of "auto consumption", i.e., consumption of own production – varies greatly across countries especially with the enlargement of the EU.

For the analysis and evaluation of comparability, it will be necessary to carefully study the magnitude of the above aspects across countries in order to identify the main sources of non-comparability. The next step would be to try and quantify the impact of these aspects on the inter-country comparability of EU-SILC data.

Such assessment of comparability is an essential aspect in the implementation of EU-SILC, albeit a difficult and challenging one.