EUROPEAN UNION COUNTRIES PRACTICE ON RELATIVE POVERTY MEASUREMENT

Ian DENNIS[1]

[1] Administrator, Project Leader:
  Statistics on Income, Poverty & Social Exclusion, Eurostay

III. RELATIVE POVERTY

A Introduction. Conceptual guidelines to define limits of the content of this section

1.1 It is axiomatic that before one can start to measure a phenomenon, it has first to be adequately defined. Within the European Union (EU) this issue is a subject of perennial, intrinsic interest, but in recent years it has received increasing political attention. Opinion polls have highlighted concerns about the persistence of poverty (varying definitions) and the rise of new forms (ie. new groups at risk) in the context of a re-evaluation of existing social protection systems. The concept of a 'European Social Model' as a distinguishing factor from the United States of America has increasingly seen quality of life as a complement or replacement for the central focus on economic wealth.

1.2 Unfortunately, it is difficult to find a definition of 'quality of life' that satisfies everyone. Even for the more restricted concept of 'poverty' the list of potential alternatives is already long and continuously evolving. Accordingly, any selected definition is to some extent arbitrary, depending on the prevailing value consensus.

1.3 An official definition was adopted by the Dublin European Council in 1984, which regards as poor: *"...those persons, families and groups of persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member State to which they belong."* This definition, whilst not operationally precise, clearly implies a multidimensional, dynamic and relative approach.

1.4 The nature of the relations between the EU institutions and Member States is still evolving. This is particularly true in the domain of social policy, which has not yet attained the degree of harmonisation/consensus apparent for economic policy. Nevertheless, important decisions have been taken and progress has been made to operationalise the political definition, and take appropriate actions to achieve greater social cohesion and eradicate the scourge of poverty and social exclusion.

1.5 New impetus was given at the Lisbon European Council in 2000, with a 'Social Policy Agenda' adopted at Nice later that year, and the creation of a Social Protection Committee and related Indicators Sub-Group. These developments seem likely to feature formally in the EU convention which is currently under discussion.

1.6 Building on the prior work of Eurostat, which is an active member of the Indicators Sub-Group, a set of quality criteria ("principles which should guide the construction of indicators for social inclusion in Europe") and a first set of 18 indicators were adopted at the Laeken European Council in December 2001. A first set of results was published by Eurostat in April 2003, covering the EU member states, and coverage was subsequently extended to the Acceding and Candidate Countries later in 2003. Use of the 'Laeken' indicators has been highlighted in the recent National

Action Plans on Social Inclusion prepared by Member States and the associated Joint Inclusion Report 2003-05 which is currently being finalised, and in the Joint Inclusion Memoranda currently being negotiated with Acceding Countries. Work is ongoing within the Indicators Sub-Group to refine and develop the list of indicators.

1.7 The focus of the Laeken indicators is on the ability to participate in one's own society: ie. a RELATIVE measure which recognises that behaviour patterns can and do change over time and space in response to circumstances.

1.8 More mundanely, the attraction of the relative measure can be seen in the following monetary example. Assuming an individual has a once-only choice between the two states of the world A and B in the table, the rational economic choice might be situation B (greater absolute income for the individual) whereas behavioural research suggest many individuals may prefer situation A in practice (greater income relative to others).

	Self	Others
A	$\in$ 100 000	$\in$ 67 000
B	$\in$ 110 000	$\in$ 165 000

1.9 Notwithstanding, purely relative measures may yield paradoxical results.
- With rapid economic growth and constant inequality, absolute poverty may decrease dramatically as everybody's living standard improves ("a rising tide lifts all boats") – but relative measures will show no change (or, if the growth is unequally distributed, even a worsening), which may conflict with the popular perception. Conversely, if general living standards decline, relative poverty may show no change or even an improvement. However, this dissonance is likely to be a temporary phenomenon whilst perceptions adjust to the new situation.
- A relative definition makes elimination of the phenomenon, and even reduction of its incidence, nearly impossible. This can sometimes be difficult to explain to policy-makers.

B. Standards and resources.

2.1 Because an indicator is something specific, it is possible to have a multitude of similar indicators relating to a single subject (eg. relative income situation). The indicators could be a number (eg. X persons have an income below $\in$Y), or a percentage (eg. X% of persons have an income below $\in$Y), or a ratio (eg. the average income of the poorest quantile is 1/X of the average income of the total population), or more complex calculations.

2.2 The best way to reduce a large set of data to a manageable size and still retain part of the information is to use a single representative value such as a total or a measure

of central tendency (eg. the mean, the median, the mode, others – with or without weighting). The median is the most stable such measure, avoiding the risk of contamination by potentially less-robust, extreme values at either end of the income distribution. Such distributions are rarely symmetric, and the mean is generally significantly higher than the median.

2.3 At EU level (the Laeken indicators), the median is the basic measure used as a reference for the setting of the standard risk-of-poverty threshold (60% of the median income). In practice, Eurostat calculates and publishes rates according to various risk-of-poverty thresholds using various percentages (40, 50, 60, 70%) of the median and the mean.

2.4 Depending on available statistical sources, such thresholds could potentially be applied to data on expenditure or income or wealth, or indeed any other variable. In practice, few countries have reliable surveys to collect information on wealth. In some countries, household expenditure surveys are integrated with income surveys, whereas in others they are separate, and elsewhere only one or the other may exist. Typically, in expenditure surveys income data may only be collected as a control variable and is therefore of lower quality. Similarly, in income surveys expenditure information may be less reliable. Where separate surveys are conducted methodologies may not be similar.

2.5 There are strong arguments for preferring data from income surveys rather than expenditure data as the basis for establishing the risk-of-poverty threshold. Income reflects the opportunities of the consumer rather than actual outcomes, and is therefore a better basis for comparing welfare, as it focuses on <u>access</u> to resources rather than their <u>use</u> (voluntarily low consumption expenditure does not indicate poverty!). Incomes can be more volatile than expenditure levels as the latter can be sustained out of accumulated savings or borrowings, but this is generally only possible in the short-term and does not reflect the actual underlying circumstances.

2.6 Moreover, in practice, allocation of consumer expenditure between COICOP categories may cause difficulties in certain countries. The treatment of expenditure on durable goods can be particularly problematic. Many respondents may deliberately understate certain expenditures (eg. alcohol consumption; illegal activities) – or overstate spending on 'conspicuous consumption'. During expenditure surveys, in order to reduce the burden, respondents are typically required to complete a short diary which is used to extrapolate spending for the rest of the year: experience suggests this may not be very accurate! Similarly, survey sections where respondents "recall" previous expenditures may suffer reliability problems.

2.7 This is not to say that household income surveys do not also have their practical problems. They are just as likely to miss vulnerable groups (eg. the homeless; persons in collective institutions) as are expenditure surveys. Valuation of owner-occupation and other non-monetary ('in-kind') transactions generate similar

problems for both sorts of survey. There may be under-declaration of income for reasons of modesty, or more probably to exclude income from illicit activity or to evade taxation. Certain categories (eg. self-employment; benefits-in-kind) are notoriously difficult to measure.

2.8 On balance it has long been accepted at EU level that incomes are a preferable basis. This could not be reflected in practice until 1994, when the pioneering 'European Community Household Panel' survey was launched, prior to which expenditure data from Household Budget Surveys was used. Alongside other variables, the ECHP collects information on net monetary income accruing to the household and its members from all sources – including work (employment and self-employment), private income from investment and property and social transfers received directly. No account is taken of indirect social transfers, loan interest payments, transfers to other households, imputed rent from owner-occupation, income-in-kind. This longitudinal survey was launched prior to adoption of the Canberra Manual and does not therefore allow full compliance: it's successor, the EU-SILC, will permit greater consistency.

2.9 Once total household net income (or expenditure) is collected, the figures are typically converted to reflect differences in household size and composition, using an equivalence scale. Whilst the desirability of such adjustment is commonly accepted, various such scales exist and the choice is essentially arbitrary. They all assume a greater or lesser degree of sharing of household resources amongst household members. In the EU the so-called "modified-OECD" scale is used, which gives a weight of 1.0 to the first adult, 0.5 to any other persons aged 14 or over, and 0.3 to each child. The resulting value is attributed to each household member.

2.10 Alternative approaches to the setting of a national relative monetary risk-of-poverty threshold are possible. These include a pan-European poverty threshold (eg. established as the population-weighted average of the individual national thresholds); arbitrary methods such as separately-established official minimum income levels (eg. eligibility for benefits); subjective methods such as the 'Leyden Poverty Line' using some variant of the question "How much do you need to make ends meet?/Are you able to make ends meet?"; objective methods such as measuring the distribution of asset ownership, of general consumption expenditure, or identifying the expenditure necessary to ensure a minimum calorific food intake – and setting the risk-of-poverty threshold accordingly.

2.11 For varying reasons, most of these approaches have been explicitly rejected at EU level. In particular, the budget standard approach is felt to be too costly to implement and update. The distribution of asset ownership raises problems in terms of quality comparability. By contrast, the subjective approach is thought worthy of further consideration, resources permitting.

2.12 The discussion has so far concentrated on variants of the "headcount ratio" relative approach to monetary poverty measurement. Within the EU, the need to

complement the official indicator (risk of poverty rate according to threshold set at 60% of median income) with other indicators.

2.13 Additional Laeken indicators of monetary poverty include measures to assess the duration of poverty (eg. the persistent risk-of-poverty rate); the severity ('depth') of poverty (eg. the risk-of-poverty gap); the distribution of income within the non-poor population (eg. the Gini coefficient; the s80/s20 income quintile share ratio); and a new proposal for a specific indicator concerning the poverty risk of persons in work.

1. Standards.
   a. Percentage of the median household income or expenditure (per-capita or equivalence scales).
   b. Percentage of the average income or expenditure (per-capita or equivalence scales).
   c. Budget standards as a limit to be satisfied for all households to achieve a given standard of life.
   d. Child poverty as a characteristic of inequality

2. Standards. Units of measurement.
   a. Monetary income.
   b. Imputed monetary value of service of own occupied dwelling.
   c. Imputed monetary value of freely received public service.
   d. Imputed monetary value of service derived from durable consumer goods.
   e. Budget standards: Monetary minimum value or quantity consumption or possession of selected items of expenditure for different types of families or households. Quantity, quality, prices and lifetime for durable goods.

3. Standards. Sources of information.
   a. Households surveys of income and expenditure.
   b. Population and housing census.
   c. National accounts household income and public expenditure.
   d. Other administrative information.

4. Resources to satisfy standards.
   a. Household income.
   b. Public monetary transfers.
   c. Public freely provided services.

d. Imputed income for own house occupiers.
e. Imputed income from durable consumer goods.
f. Households expenditure components.

5. Resources for satisfying standards. Sources of information.
a. Household surveys that include income.
b. Household surveys that include expenditure.
c. National accounts household income and public expenditure.
d. Other administrative information

C. Availability of regular established calculations.
1. World or regional level. EUROSTAT, ECLAC, UNICEF.

3.1   The Laeken indicators and other statistics are compiled/produced by Eurostat from common sources (currently the ECHP, soon to be the EU-SILC). These are published by Eurostat in regular series (eg. electronic database "New Cronos" and paper texts such as Eurostat Yearbook, Social Situation Report, IP&SE Detailed Tables, Statistics in Focus) and ad-hoc publications. They are also supplied to policy directorates within the Commission, for use in regular publications (eg. Joint Inclusion Report, Joint Inclusion Memoranda for Acceding and Candidate Countries, Commission 'synthesis' report to the Spring European Council) and other purposes.

3.2   The ECHP survey is organised in annual 'waves'. Data supplied by member states is combined, anonymised and made available for public use in a 'user data base'. Similar indicators can thus be produced by academics, researchers, etc. using the Laeken indicator criteria and methodology which have been publicised. The methodology is employed by Member States and by Acceding and Candidate Countries using national data sources, and can be applied by other interested parties such as NGOs and the academic research community. These are complemented by other indicators of relative poverty calculated according to different methodologies and using alternative data sources.

3.3   The Luxembourg Income Study is an independent organisation which compiles/produces a range of international statistics, including relative monetary poverty, covering many EU member states, Acceding and Candidate countries, and additional countries such as USA and Japan for which Eurostat does not currently compile data. However, their results have no official status for EU countries.

3.4   The OECD compiles and publishes various social statistics for its member countries using a relative approach. To the extent these are not based on data provided by Eurostat they have no official status for EU member states.

D. Technical characteristics: Similarity and differences among estimates.
1. Experience in time, frequency.
2. Official status. Alternatives
3. Objectives, uses, dissemination.
4. Geographical coverage and dessagregation of results.

4.1 EU data to allow calculation of Laeken and other indicators is collected annually under ECHP for member states and under annual pilot project for Acceding and Candidate Countries. Indicators are calculated whenever validated data becomes available. Coverage is summarised in the table below:

Country			Time series	EU-SILC
01	BE	Belgium	ECHP: 1994..2000 (2001)	2004
02	DK	Denmark	ECHP: 1994..2000 (2001)	2004
03	DE	Germany	ECHP: 1994..2000 (2001)	*2005*
04	EL	Greece	ECHP: 1994..2000 (2001)	2004
05	ES	Spain	ECHP: 1994..2000 (2001)	2004
06	FR	France	ECHP: 1994..2000 (2001)	2004
07	IE	Ireland	ECHP: 1994..2000 (2001)	2004
08	IT	Italy	ECHP: 1994..2000 (2001)	2004
09	LU	Luxembourg	ECHP: 1994..2000 (2001)	2004
10	NL	Netherlands	ECHP: 1994..2000 (2001)	*2005*
11	AT	Austria	ECHP: 1994..2000 (2001)	2004
12	PT	Portugal	ECHP: 1994..2000 (2001)	2004
13	FI	Finland	ECHP: 1994..2000 (2001)	2004
14	SE	Sweden	ECHP: 1994..2000 (2001)	2004
15	UK	United Kingdom	ECHP: 1994..2000 (2001)	*2005*
16	IS	Iceland	-	2004
17	NO	Norway	National: 1995..2000 (str.ind. only)	2004
18	CH	Switzerland	-	-
19	CZ	Czech Republic	Microcensus: 1996, 2001	*2006*
20	EE	Estonia	HBS: 1996..2002	2005
21	CY	Cyprus	HBS: 1997	2005
22	LV	Latvia	HBS: 1996..2002	2005
23	LT	Lithuania	HBS: 1996..2002	*2006*
24	HU	Hungary	HBS: 2000..2001	2005
25	MT	Malta	HBS: 2000	2005
26	PL	Poland	HBS: 1999..2001	2005
27	SI	Slovenia	HBS: 1996..2000	2005
28	SK	Slovak Republic	-	*2006*
29	BG	Bulgaria	HBS: 1998..2001	2005
30	RO	Romania	HBS: 1998..2001	2005
31	TR	Turkey	HBS: 1994, 2002	2004

Note: launch dates for Iceland and for the Acceding and Candidate Countries are provisional.

4.2 Research is ongoing to establish the feasibility and methodology of establishing regional breakdowns of the indicators.

4.3 Breakdowns of the Laeken 'risk-of-poverty rate' indicator are established according to the analytical variables in the following list:
- Age
- Gender
- Household type
- Activity status
- Tenure status

This allows identification of the most vulnerable groups in society (eg. the elderly (especially women); children aged 0-15; young adults aged 16-24; single person households; lone parents; families with more than 2 children; the unemployed; the inactive; tenants).

4.4 Eurostat already produces on a regular basis the following additional breakdowns of the risk of poverty:
- Main source of income
- Educational attainment level

4.5 Other breakdowns could also be considered:
- Nationality (eg. citizenship/ethnic origin/language)
- Occupation (eg. managerial/administrative/manual; eg. permanent/ temporary)
- Health status
- Location (eg. rural/urban)

4.6 The Laeken indicators have official status within the EU. They are used to monitor progress of member states towards commonly agreed objectives (this evaluation process also makes reference to additional indicators).

E. Challenges, options, and shortcomings.
1. Relation between relative income level and other patterns of poverty.
2. Relation with poverty Dynamics.
3. Spatial measurement in countries with heterogeneous regions

5.1 Whilst the headcount at-risk-of-poverty rate estimate at national level for the total population may have the highest profile, the Laeken 'portfolio' is intended to be used as a balanced set and complemented by "third-level" indicators as necessary to help explain specific circumstances.

5.2 The main limitations in the current portfolio are felt to be:
- ECHP (and Acceding/Candidate Country) income definition non-compliance with Canberra Manual recommendations. This will be corrected with eventual launch of EU-SILC in all countries.
- Over-emphasis on monetary poverty. This may shortly be corrected depending on the results of a Eurostat research into non-monetary indicators.

- Absence of agreed indicators on housing quality, housing precarity and homelessness. This may also shortly be corrected depending on the outcome of a Eurostat research project into homelessness and the foregoing research into non-monetary indicators.
- Non-breakdown by nationality/ethnicity. This is a sensitive political question.
- Absence of indicators relating to health, including disability, drug abuse, alcoholism, teenage pregnancy, etc. The Indicators Sub-Group is expected to take up the subject of Health Indicators during 2004.
- Absence of specific measures of over-indebtedness and benefit-dependency. Research to date has not resulted in an agreed measure.
- Absence of measures of exposure to crime, access to justice, respect for human rights.
- Absence of a subjective measure of poverty and exclusion to complement the existing indicators.

5.3 The lack of a necessary connection between economic growth and relative poverty reduction has already been discussed earlier in this paper.

5.4 The main advantage of longitudinal panel surveys over periodic 'snapshots' is the ability to investigate the dynamics of poverty. With two consecutive periodic surveys it is difficult to be sure whether the "poor" population involves the same individuals, a whole new set of persons, or some halfway combination. Unfortuantely, Eurostat resource constraints have to date prevented full analysis of poverty dynamics from the ECHP, although some work has been undertaken (eg. 2nd IP&SE Report).