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Economic Commission for Latin America and the Caribbean
IBGE
Brazilian Institute for Geography and Statistics
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THIRD MEETING OF THE EXPERT GROUP ON POVERTY STATISTICS (Rio Group)

LISBON, 22-24 November, 1999

UNITED NATIONS

E C L A C

Economic Commission for Latin America and the Caribbean

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Preliminary Report

ECLAC

CONTENTS

WORK UNDERWAY ON COMMON PRACTICES IN THE FIELD OF POVERTY STATISTICS BY MEMBERS OF THE RIO GROUP

Trends towards establishment of an official head count ratio

1. There is a wide spread trend towards the establishment of an official head count ratio indicator in most countries to assess the numbers who are poor. Furthermore, in countries where this indicator already exists since a rather long period, there is pressure for updating it. At the international level, at the UN world conference in Copenhagen and in other regional fora, agreements have been reached to monitor the evolution and extent of poverty.

Basic expenditure items for the calculation of a poverty line

2. Most traditional head count ratio indicators are normally constructed using simple operational procedures. Originally, the poverty line was based on a direct estimation of the normative requirement of food. At present, normative expenditure for other items are also being considered in a direct way in countries such as United States and Canada, where estimates for shelter and clothing have been proposed. In some other countries expenditures on other items has been studied although not yet incorporated in the basic basket (bundle) used in the Poverty Line.

Multipliers in the establishment of a poverty line

3. To move from the basic food bundle towards a more comprehensive poverty line normally requires the application of a multiplier determined from a study of household expenditure behavior. In many of the original estimates this multiplier was closely related to the establishment of an Engel coefficient. At present, in some cases such as the United States, this multiplier has a different objective: it is applied towards including other basic expenditures. This can be illustrated by the fact that, at present, the proposed multiplier varies from 1.15 to 1.25 depending on the demographic structure of the household and the nature and extend of other "necessities" to be included.

4. In those countries where the original idea of using an Engel coefficient is still present, as is the case of many Latin American countries, a rather universal and well known phenomena is observed: households that within a short range of variation satisfy their nutritional needs, spend a decreasing percentage of their income on food. Therefore, if the real cost of food has not changed, the poverty line could be much higher in real terms. As an example, in 1970 that percentage share of food was around half in many Latin American countries whereas today it s nearer to only a third. Nonetheless, if the real cost of food items has decreased the impact could also be attenuated.

Changes in patters of consumption

5. Changes in patterns of consumption associated to growth in real income have led with an increasing replacement of the concept of absolute poverty by partial or extended acceptance of the concept of relative poverty. A symptom of this trend is the introduction of medians of expenditures/income in the calculation of elements of the poverty line. During the Meeting, different formulas were presented that captured this type of trend and its relative significance.

Updating the poverty line

6. The need to update the poverty line has also gained importance in all countries in order to take into account changes in patterns of consumption and prices. In the past, some countries have updated the price component of their poverty line using the aggregated consumer price index but it is recognized that a more sophisticated method should be used. In countries where sources of information that are able to capture changes in the pattern of the items included in the bundle are available, there are proposals to incorporate these changes. The need to consider separately different prices of items of the bundle is being followed in many countries in updating their poverty lines.

7. The need for updating does create problems in relation to improving public understanding of what is being done. The conservative position opposes changes so as to avoid such discussions, because these are not always easy to handle. Therefore, in the interests of transparency this institutional and political topic is one where the need to contrast experiences between different countries via of consultations with different agents and dissemination techniques could prove extremely useful.

Regional poverty lines

8. There is also an increasing recognition that regional and local differences cannot be disregarded when calculating poverty lines. Experiences of many countries, particularly large ones and those with contrasting urban and rural regions, make it evident that proposals to include regional differences imply important changes in the relation between poverty lines of regions. Preliminary results from these countries provide evidence of different expenditure baskets, different food baskets and differences in prices. Nonetheless, it seems that there is a tendency towards the reduction in relative price differentials and, therefore, other differences are becoming relatively more important. On occasions, local poverty lines can reflect the consequences of public transfers or subsidies in important items of household consumption.

Stability of income consequences in poverty measurement

9. Estimation of poverty lines depends heavily on the measurement of the income of households, specially in the absence of expenditure data. From the experience of various countries, it is evident that household incomes may vary widely within a short period of time as well as significantly over a person's lifetime (see later). This raises different methodological and operational problems. Operationally, the desirability of having longitudinal surveys becomes evident. In the nineties, these types of household survey are becoming to be more intensively used in the follow-up assessments of the social situation and poverty, in particular, in European countries and in Canada. In some other countries, the current households' survey sampling framework (households are interviewed during several waves) may allow for some limited analysis in this field. The Group is confident that an important and increasing quantity of research will develop from this type of survey.

Movement of households across the poverty line

10. Methodologically, it is now easier to evaluate how households move across the poverty line. Results from the Canadian experience reveal the percentage of households that, according to preliminary figures, are permanently in poverty. That percentage seems to be near the 25% or 30%. On the other hand, it is possible to determine the characteristics of those households that are more vulnerable to fall into poverty and those which are able to escape from their poverty condition. This creates possibilities to be more precise in making recommendations and towards targeting measures to avoid or reduce vulnerability to poverty.

Current, time average or permanent income in poverty estimates

11. Simultaneously, this situation makes it possible to use averages of income over several periods as a better representation of households' resources and exposure to poverty. Concretely, in the case of Argentina, the use of averages leads to a nominal reduction in the percentage of household in continual poverty.

12. The fact that household income is vulnerable to short term economical cycles raises the question as to the origin of changes in household expenditures in the short term. Changes in consumption patterns because of short-term changes in income are rather differei t to changes due to medium term trends in consumption patterns. The vulnerability to low income has a cost for families and, therefore, the use of a simple average could underestimate the consequences of income variations.

13. Although there is agreement on theoretical grounds that the use of permanent income or expenditure could permit a better understanding of medium-term behaviors and household welfare, there are few practical possibilities at present of obtaining information to produce these types of estimate.

Equivalence scales

14. There is wide consensus that the use of equivalence scales is the conceptually correct procedure to evaluate household resources available to satisfy basic needs. Such adjustments allows analysts to consider the needs of household members according to their characteristics and to acknowledge the decreasing marginal cost due to the addition of new members to it. However, the same consensus does not exist with respect to the way in which these equivalence scales should be estimated. Most criteria a set of arbitrarily defined decreasing coefficients. No strict conceptual procedure has been applied to determine those coefficients. Therefore, it seems necessary to carry out some empirical investigation based on the data available using different estimation methods. This will allow comparisons that take into account the particular situation of different countries. Work underway by members of the Rio Group has analyzed the equivalence scales used in Europe and in some other developed countries. It has also been confirmed that, in Latin America, only a small group of countries apply in their poverty estimates this type of measurement. It is believed this is a subject that should continue to be analyzed with the increasing availability of information on household income and expenditure in most countries.

Poverty estimates in the framework of economic and social indicators

15. The Group paid special attention to the European experience in terms of harmonization of social indicators and of sources of information. In the case of Europe, and increasingly in other regions, there is a conscious need to counterbalance the trend towards considering only economic indicators when evaluating welfare. In all regions an effort is underway to produce social statistics aimed at identifying problems and designing and monitoring policies. In the European experience this related to the approval of treaties oriented towards complementing economic criteria with social criteria. In the case of the UN, most world conferences during the nineties have concentrated on social topics.

Sources of information in the European experience

16. These agreements derive from an increasing demand on national statistical systems to produce information useful for policy monitoring and designing. In Europe, one statistical response has considered the harmonization of a set of core variables and of statistical inputs or instruments used as basic sources of information. This is a complex process that raises numerous challenges but where it is also possible to verify important achievements.

17. Special attention was placed on resolving the dilemma of relying on one very powerful instrument such as a very comprehensive household survey or census, or to use simultaneously different sources of information. Currently the second solution appears as the only practical alternative, but still further work is needed for a fruitful use of different sources of information.

Household income estimates and the experience of the Canberra Group

18. Among the variables needed for poverty estimates, income is the one many consider most important. The European experience following some of the guidelines of the Canberra Group on income measurement was presented. Progress in putting together micro and macro sources, in the conceptual field, in improving quality, in a more intensive use of metadata and in the analysis of coverage was described.

Work underway in other regions: ESCAP and Transition Countries

19. Work underway in other fora was reviewed. The ESCAP region is working in close contact with the Rio Group and, with experience gathered from the first two meetings, is making important progress in monitoring the success of poverty alleviation policies in that region. Simultaneously, INSEE of France is preparing a meeting for the year 2000 oriented towards establishing comparisons between some countries of the European Union and the transition countries in Europe that are accession candidates to the EU. For many practical reasons, the use of harmonized tools will benefit the process of incorporation.

Objective and subjective poverty

20. Spain presented new estimates of the relation between objective and subjective poverty measures based on recent surveys. It became evident that there are some households which are below the poverty line but do not perceive they are in such a situation. Simultaneously, many objectively non-poor households perceive deprivation conditions not so different from those of the objectively poor households. The European longitudinal survey makes this type of analysis possible and, therefore, many more reports on this topic should become available soon. During the meeting, Professor Townsend of University of Bristol presented one recent survey carried out in the United Kingdom with preliminary results that show that poor households give high priority to social relations and to the environmental conditions faced by their families. These are different from the priorities normally assumed in objective measurements of poverty.

Income distribution and poverty

21. The Group examined the importance of the relation between income distribution and poverty. Progress and shortcomings in closing the gap between developed and developing countries were examined. For many regions, there has been little progress and on occasion, some drawbacks. Obviously, this situation does not contribute to poverty alleviation in poor countries. The need to study international conditions as an important factor influencing possibilities of poverty alleviation was also considered. As a consequence of globalization, it is possible that in many countries the percentage of domestic gross income received by resident households may have diminished due to the increasing share gained by external agents. It was recalled that poverty alleviation has a much higher political status than income distribution improvement.

Poverty alleviation policies and vulnerable groups

22. The demands for improved policy design and monitoring oriented more to poverty alleviation were examined. In this field, one of the first demands is to identify variables that influence poverty situations such as the labor market, education, demographic and geographic factors, and public policies. At the same time, the relation between policies oriented towards poverty and those geared towards vulnerable groups were examined.

23. In this context, the case of public health policy in Chile and of actions targeted to reduce child poverty were examined. An analysis of the relationship between the targeting of public health and the distribution of private health services to the poor was presented. This also discussed the balance between fiscal burden and use of resources by the different income quintiles. It was shown how, in the United States, an effort is underway that will permit a better understanding of the present situation with respect to poverty situations of many groups defined according to US legislation and political needs. This reinforced the fact that a high percentage of children are poor, and that they are by far the most significant at risk. The Group felt there is a clear need to strengthen, at both the country and international level, the rights of children, as already agreed by governments.

Budget standards and policy monitoring

24. Within the area of monitoring policy but also in close relation to methodological topics, the Australian budget standards developments were examined. A report is available indicating two types of standards that have been identified for two levels of welfare: adequate but modest and low cost. Nine types of expenditure have been calculated and more than twenty types of household have been studied. This provides very important documentation for comparing expenditures in different social programs, to make progress towards equivalence scales, and to compare the value of satisfying this type of standard with currently available household incomes.

Standards for the measurement of relative poverty in Europe

25. The European and Portuguese experience in implementing the demands of the political system to create standard statistical operative tools relating to poverty and social exclusion were introduced. The relationship between income distribution and relative poverty became quite evident. Comparing preliminary results for 1993-94, raises questions about the real meaning of figures that give similar percentage of relative poverty in countries that have a very different per capita income.

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Third Meeting of the Expert Group on Poverty Statistics (Rio Group)
Lisbon, 22-24 November, 1999

AGENDA

MONDAY 22

09.00-10.00   Registration of participants

10.00-10.30   Expert Group: Goals and expectations
IBGE, NSI of Portugal and ECLAC

10.30-12.30   **Session 1: Work underway by members of the Group on poverty line methods**

Experimental poverty thresholds for the United States 1990 to 1998. *Kathleen Short (Bureau of the Census, USA)*

Opções Metodológicas para a estimação de linhas de indigência e de pobreza no Brasil. *Sonia Rocha (IPEA, Brazil)*

11:30-11:45   Coffee Break

Regionalised poverty lines: general comments and applications for Brazil. *Ricardo Henríques (IPEA, Brazil)*

Diferencias regionales en los patrones de consumo en el Perú. *Alberto Padilla (INEI, Peru)*

12.30-14.30   Lunch offered by INE

14:30-17:30   **Session 1: cont.**

Poverty and low income measurement in Canada: Recent analyses and future directions. *Alison Hale (Statistics Canada)*

The use of income for poverty assessment. *Luis Beccaría y Pablo Perelman (SIEMPRO, Argentina)*

16:00-16:15   Coffee Break

Equivalence scales: A brief review of concept and methods. *Fernando Medina (ECLAC)*

20.30   Dinner offered by ECLAC

TUESDAY 23

09.30-12.30   **Session 2: European and international experience to move towards common practices in the measurement of poverty**

The Canberra Group experience on household income measurement *(EUROSTAT and ECLAC)*

European experiences in household income statistics. *Pieter Everaers (EUROSTAT)*

Techniques for relating income distribution patterns with poverty counts. *Michael Ward (WORLD BANK)*

11.00-11.15   Coffee Break

Contraste entre medidas objetivas y subjetivas de pobreza. *Carmen Ureña (INE, España)*

Poverty comparison in some European countries. *Madior Fall (INSEE, France)*

12.30-14.30   Lunch offered by INE

14:30-17:30   **Session 3: Use of poverty statistics in the design and monitoring of poverty alleviation policies**

Application of the newly developed Budget Standards in Australia. *Judy Schneider (ABS, Australia)*

Poverty measurement as an instrument to design, monitor and evaluate health policy in Chile. *Reynaldo Ruiz (MIDEPLAN, Chile)*

Indexes of social lag in the communities of Mexico. *José Vences (INEGI, Mexico)*

16:00 – 16:15   Coffee Break

Ethnic poverty and social vulnerability data sources from the Census of the United States and the American Community Survey. *John Reed (Bureau of the Census, USA)*

Putting children into poverty statistics. *Alberto Minujin (UNICEF)*

WEDNESDAY 24

09.30 -14.00 **Session 4: Poverty and its relation with other social indicators**

Statistics on social exclusion: The EU methodological approach. *Lene Mejer (EUROSTAT)*

Estatística e investigação: Portugal no contexto Europeo. *Lidia Barreiros (NSI, Portugal)*

11:30 – 12:00 Coffee Break

12:00 – 13:15 **Session 5: The future agenda for the Rio Group - Discussion**

(IBGE and ECLAC)

13:45 – 14:00 **Session 6: Poverty and social exclusion survey of Britain**

Absolute and overall poverty. *Peter Townsend (United Kingdom)*

SESSION 1:

WORK UNDERWAY BY MEMBERS OF THE GROUP ON POVERTY LINE METHODS

Experimental Poverty Thresholds for the United States 1990 to 1998

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U.S. CENSUS BUREAU**

CONTENTS

I. INTRODUCTION[2]

Economic and social conditions have changed in the U.S. in fundamental ways in the last thirty years—there are more working mothers, health care costs are much greater, there are wider variations in commodity types, and expectations about what it takes to meet one's needs are higher. Certainly, patterns of consumption have changed. In addition, geographic variations in housing and the increasing importance of government programs have affected families' appraisals of the value of their disposable incomes. Fisher[3] refers to such developments as changes in social processes. As he notes, with technological advances new consumption items are introduced. With the introduction of new items and their general acceptance and use, notions about "necessities" change. Furthermore, changes in tax and transfer policies over time have important effects on the consumption patterns of families and individuals. With these and related changes come questions concerning whether the measures and data which are used to produce various economic statistics are still meaningful. Among these is the official measure of poverty.

Beginning in 1992 an important comprehensive examination of poverty measurement in the United States was conducted by the National Research Council (NRC) of the National Academy of Sciences (NAS) Panel on Poverty and Family Assistance. This Panel of scholars published their findings in a report titled *Measuring Poverty: A New Approach.*[4] Included in the report are recommendations for a new poverty measure, along with examples of how to implement the recommendations. The NAS Panel recommended that a new poverty measure should, "… reflect more nearly the circumstances of the nation's families and changes in them over time."[5] The Panel stated that a minimally adequate standard of living would include a basic needs commodity bundle, plus a small additional amount to allow for other needs (e.g., household supplies, personal care, and non-work-related transportation.) The NAS Panel defined the basic needs bundle to include food, clothing, shelter, and utilities. Family economic resources should be defined as the sum of money income from all sources and near money benefits from government transfer programs (e.g., food stamps, subsidized housing) that can be used to buy the commodities in the full needs bundle, less expenses that cannot be used to buy these commodities. These deductions would include income and payroll taxes, child care and other work-related expenses, child support to another household, and out-of-pocket medical care costs.[6] If a family cannot meet its needs for these basic commodities with its available family economic resources, then the family would be considered poor. In their work then, poverty is defined as economic deprivation.

II. BACKGROUND

In order to produce poverty statistics, a poverty concept must be selected and resources defined. The most often used concepts for poverty measurement are identified as absolute, relative, and subjective.[7] An absolute measure reflects some standard below which, it is believed; basic needs cannot

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[2] Much of the general description of thresholds in this section of this paper draw from an earlier paper, Garner, Thesia I., Stephanie Shipp, Geoffrey Paulin, Kathleen Short, and Charles Nelson, "Poverty Measurement in the 1990s", *Monthly Labor Review*, March 1998, pp. 39-61.

[3] Gordon Fisher, "Relative or Absolute-A New Light on the Behavior of Poverty Lines Over Time," Newsletter *of the Government Statistics Section and the Social Statistics Section of the American Statistical Association*, Summer 1996, pp. 10-12.

[4] Connie F. Citro and Robert T. Michael (eds.), *Measuring Poverty: A New Approach*, Washington, D. C.: National Academy Press, 1995.

[5] Citro and Michael, 1995, p.4.

[6] Citro and Michael, 1995, pp. 4-5.

[7] For more information concerning these measures see: Citro and Michael 1995; Aldi J.M. Hagenaars, *Perception of Poverty*, Amsterdam: North Holland, 1986; and Patricia Ruggles, *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy*.

be met. Absolute measures often require a large number of judgments about an approved set of expenditures for the poor. The current U.S. official poverty threshold is assumed to reflect some absolute minimum. A relative poverty concept is based on the relative position of households or individuals within a distribution (e.g., of income or expenditures) as a crucial determination of poverty status. Such a measure explicitly sets the poverty threshold based on judgment. Subjective measures are based upon the notion that the opinions of people about their own situations (e.g., with respect to the income level minimally necessary to make ends meet) should ultimately be the decisive factor in defining poverty.[8]

A.   History of U.S. Poverty Measurement

The poverty thresholds, originally developed in 1963-64, were based on an explicit concept of need. Mollie Orshansky, who worked at the Social Security Administration, derived what became known as the official poverty thresholds from the Economy Food Plan (developed in 1961 by the U.S. Department of Agriculture), and data from the 1955 U.S. Department of Agriculture Household Food Consumption Survey. The Plan was adapted to the food patterns of lower income families, and was developed to provide a nutritionally balanced diet. However, as noted by Fisher, the Economy Food Plan was to be for "temporary or emergency use when funds are low."[9] The dollar costs of the food plan were produced for families of different sizes and compositions. Minimum total living costs were computed by multiplying the dollar value of the minimum food plan by three since the average family of three or more persons spent about one-third of their average money income after taxes on food. This multiplier was based on the relationship between food expenditures and total after tax money income of the total population using data from the 1955 Household Food Consumption Survey. The thresholds for other size families were derived in a slightly different way.[10]

The Panel suggested that one of the reasons the Orshansky-based thresholds were adopted is because of their relationship to other related measures at the time: the original 1963 threshold for a two-adult/two-child family was very close to one-half the median after-tax four-person family income and to a subjective four-person family threshold derived from Gallup Poll data.

As noted above, the current U.S. poverty threshold is generally considered to be an absolute threshold (although not originally developed as such) and is based on the cost of a minimum food diet along with a multiplier for other expenses. Since the 1960s, when the U.S. officially began to produce poverty statistics, the same basic poverty concept has been used. However a few changes have been introduced over time. Until 1969, the original thresholds were updated annually based on changes in prices of only the items in the economy food plan. In 1969, a federal interagency committee changed that procedure. Since that time annual updates are made using the all-time CPI-U. Further, originally there were separate thresholds for families headed by women and men, and for families living in farm and nonfarm areas. The male-female and farm-nonfarm distinctions were dropped in 1981 and, at the same time, the matrix of thresholds was extended to nine persons or more rather than seven or more.[11]

Washington, D. C.: The Urban Institute Press, 1990. Examples of studies focusing on relative and subjective measures include: Thesia I. Garner and Klaas de Vos, "Income sufficiency v. poverty: Results from the United States and the Netherlands," *Journal of Population Economics*, vol. 8, pp. 117-134, 1995; R. Morisette and Susan Poulin, *Income Satisfaction Supplement. Summary of Four Survey Years.* Labour and Household Surveys Analysis Division Staff Report, Ottawa, Canada: Statistics Canada, 1991; and Van den Bosch, Karel, Tim Callan, J. Estivill, P. Hausman, B. Jeandidier, R. Muffels, and J. Yfantopoulos, "A Comparison of Poverty in Seven European Countries and Regions, Using Subjective and Relative Measures," *Journal of Population Economics*, vol. 6, pp. 235-259.

[8]   These descriptions drawn from a broader discussion in Garner, Thesia I. and Klaas de Vos, "Income Sufficiency v. Poverty: Results from the United States and the Netherlands," *Journal of Population Economics*, vol. 8, pp. 117-134, 1995.

[9]   Fisher, Gordon M., "The Development and History of the Poverty Thresholds," *Social Security Bulletin*, Vol. 55, No. 4, Winter 1992.

[10]   See Fisher 1992, and Citro and Michael 1995, p. 109.

[11]   Fisher, Gordon, 1992, p.10.

The definition of poverty currently used in the U.S. is based on the price-updated thresholds in comparison to gross (pre-tax) annual money income. A family is identified as poor if its family's total annual gross money income is below its annual poverty threshold. The official definition of income for poverty measurement has not changed over time, however researchers at the Census Bureau have been experimenting with alternative measures of income for several years. [12]   Such alternative income definitions have accounted for noncash benefits and the deduction of income taxes.

In addition to forming the basis of statistical poverty measurement, the Department of Health and Human Services uses the official poverty thresholds to produce annual poverty guidelines. These guidelines are obtained by smoothing the official thresholds for different size families. The poverty guidelines are often used to determine the eligibility of families to participate in government programs that are designed to help families whose resources fall below some standard of need.[13]

B.   More Recent Examinations of Poverty Measurement in the U.S.

In *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy*, Patricia Ruggles focused mainly on alternative concepts of poverty and methods for measuring poverty; she also proposed methods to update and revise the poverty threshold and resource definitions.[14]   The Joint Economic Committee held congressional hearings in the early 1990's[15] in response to Ruggles' book and her activities on the Committee staff. As a result of those hearings, the National Research Council (NRC) of the National Academy of Sciences (NAS) Panel on Poverty and Family Assistance, chaired by Robert T. Michael, was given the responsibility to conduct the review. In 1995, the Panel issued *Measuring Poverty: A New Approach.* [16]

The NAS Panel recommended, as did Ruggles, revising the current poverty measure to more accurately reflect trends in poverty over time and differences in poverty among different demographic groups. The new measure would retain the current notion of poverty as reflecting material deprivation; however, a revised set of thresholds and a revised definition of resources would be used to identify the poor. The NAS Panel intended that the revised thresholds and resource definitions would reflect social and economic changes. This is in contrast to the method currently followed for updating the official poverty thresholds that only allow for changes in prices, as noted earlier, not for changes in consumption patterns over time. With their report, the NAS Panel's aim was to propose a *procedure* to follow. Rather than recommending an absolute, relative, or subjective measure, the Panel proposed a *hybrid* poverty measure which includes aspects of both the absolute (budget based) and relative concepts.[17]   Details concerning the hybrid approach and the new resource measure are presented below.

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[12]   U.S. Bureau of the Census, *Estimates of Poverty Including the Value of Noncash Benefits: 1984.* Technical Paper 55, Washington, D. C.: U.S. Government Printing Office, 1985; U.S. Bureau of the Census, *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992.* Current Population Reports, Series P-60, No. 186RD. Washington, D. C.: U. S. Government Printing Office, 1988; U.S. Bureau of the Census, *Poverty in the United States 1998.* Washington, D. C.: U. S. Government Printing Office; 1999; Citro and Michael 1995; Ruggles 1990.

[13]   Fisher, Gordon, "Poverty Guidelines for 1992," *Social Security Bulletin*, vol. 55, no.1, Spring 1992.

[14]   Ruggles, 1990.

[15]   See *The War on Poverty, Hearings Before the Joint Economic Committee, Congress of the United States, 102nd Congress, First Session, July 25, September 25, and November 19, 1991, S. HRG. 102-631*. Washington, D. C.: U.S. Government Printing Office, 1992.

[16]   See Citro and Michael 1995.

[17]   One measure that Statistics Canada uses to determine the low income status of families, similar to family poverty, is the set of "low-income cut-offs" (LICOs). The LICOs are based on a hybrid approach in the sense that a specific set of commodities is assumed as necessary but the proportion and implicit allowance for other spending are determined in a relative manner (see Citro and Michael 1995, pp. 127-128).

In general, the NAS Panel proposed eight broad sets of recommendations about:[18] (1) adopting a new poverty measure; (2) setting and updating the poverty threshold; (3) adjusting the threshold; (4) defining family resources; (5) identifying needed data; (6) highlighting other issues related to poverty measurement; (7) relating poverty measurement to assistance programs; and (8) linking states' needs to the Panel's proposed measure. The basic criteria for developing the poverty measure are that it should be:

- understandable and broadly acceptable to the public;
- statistically defensible (e.g., internally consistent); and
- operationally feasible.[19]

Since the NAS Panel's report was published, other studies have also examined these issues.[20] Working groups have met to share information about current work related to poverty measurement.[21]

III.   NAS PANEL PROCEDURES AND FINDINGS

A. Defining the Thresholds

With reference to the poverty thresholds, the Panel stated generally that: [22]

- The poverty thresholds should represent a budget for food, clothing, shelter (including utilities), and a small additional amount to allow for other needs (e.g., household supplies, personal care, and non-work-related transportation).

- A threshold for a reference family type should be developed using actual consumer expenditure survey data and updated annually to reflect changes in expenditures in food, clothing, and shelter over the previous 3 years.

- The reference family threshold should be adjusted to reflect the needs of different family types and to reflect geographic differences in housing costs.

Weighted expenditure data from the 1989-91 Consumer Expenditure (CE) Interview Survey were used to produce the poverty thresholds presented in the Panel's report.[23] Expenditures for a basic bundle of commodities composed of food, clothing, shelter, and utilities[24] were obtained from the CE data for a

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[18]   The entire report can be found on the Census Bureau Web site: hhtp://www.census.gov/hhes/www/povmeas.html

[19]   Citro and Michael, 1995, p. xvii.

[20]   For example see the following references. (1) U.S. General Accounting Office: (a) Controlled correspondence, GAO/GGD-96-183R (Washington DC: 1996); and (b) *Poverty Measurement: Issues in Revising and Updating the Official Definition*, GAO/HEHS-97-38, April 1997. (2) Brookings Institution and Institute for Research on Poverty: (a) "Summary of Meeting on Alternative Poverty Measure Strategy," Brookings Institution, April 8, 1997; (b) "Improving the Measurement of American Poverty," unpublished manuscript prepared by Gary Burtless, Tom Corbett, and Wendell Primus, April 8, 1997; and (c) "Implementing a New Measure of Poverty: State of Current Research and Analytical Work," unpublished manuscript by Wendell Primus, February 13, 1997.

[21]   Memorandum from Katherine Wallman (Office of Management and Budget), "Initial Meeting of Steering Group to Improve the Measurement of Income and Poverty," March 26, 1997; and Burtless, Gary, Tom Corbett, and Wendell Primus, "Improving the Measurement of American Poverty," paper prepared for the Alternative Poverty Measure Strategy Meeting, April 8, 1997, Brookings Institution. Washington, DC.

[22]   Citro and Michael, 1995, pp. 4-5.

[23]   There is also a diary portion to the CE. The diary and the interview samples are entirely independent so that expenditures from the two cannot be combined.

[24]   The basic bundle is composed of food, apparel, shelter, and utilities, which are def ned as follows:

   Food includes food purchased for home use and away, and excludes alcohol and tobacco and other non-food items purchased at grocery stores.

reference family type. The reference family was defined as including two adults and two children.[25] Their criteria was for a reference family to "fall near the center of the family size distribution rather than at one of the extremes...also, it is preferable for the reference family to be one that accounts for a relatively large proportion of the population because its spending patterns observed in a sample survey will be the basis for the poverty threshold..."[26] The two-adult/two-child family met these criteria. Multipliers were applied to the basic bundle to add a small additional amount to allow for other needs, such as housekeeping supplies, personal care, and non work-related transportation. Thresholds for additional family types were derived by applying an equivalence scale to reflect differences in family composition and needs. These thresholds were then adjusted to account for differences in the cost of housing in metropolitan and non-metropolitan areas in the country using data from the 1990 Census. The Panel used a modified version of the Department of Housing and Urban Development (HUD) methodology for developing fair market rents to produce interarea housing price index values. Index values were produced for metropolitan areas in six population size categories within each of the nine Census regions and for non-metropolitan areas (not distinguished by size) in each of the regions.[27]

Expenditures were defined as the transaction costs, including excise and sales taxes, for these commodities acquired during the interview period. Expenditures include gifts, but exclude the value of purchases or portions of purchases directly attributable to business purposes. Also excluded were periodic credit or installment payments on commodities already acquired. Expenditures for vehicle purchases included the net outlays (purchase price minus trade-in value) on new and used cars and trucks, and expenditures for other vehicles. For owned housing, neither the purchase price of the housing nor the mortgage principal payment were included in expenditures; however, mortgage interest and related charges were included. The Panel noted that this definition of the shelter costs for homeowners was used for processing convenience.[28]

The Panel stated that the "...food, clothing, and shelter [including utilities] component of the reference family poverty threshold under the proposed concept must be expressed as a percentage of median expenditures on these categories."[29] This requirement reflects the *relative* component of the hybrid poverty measure. The procedure for creating a time series of thresholds under the Panel's concept is to pick a percentage of median expenditures for food, clothing, and shelter (the basic bundle) and a multiplier. The multiplier would be applied to the food, clothing, and shelter (including utilities) component of the poverty threshold so as to allow a small fraction for other needed expenditures. With this information, a base year threshold would be established first, then the same percentage and multiplier would be used to produce the thresholds for all other years. The only requirement for each year would be the production of median expenditures for food, clothing, shelter, and utilities. The intent underlying this

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Clothing includes expenditures for all types of clothing including uniforms and sewing materials.

Shelter includes rent, and for homeowners, mortgage interest (shelter does not include principal payment) taxes, maintenance and repairs.

Utilities include fuels, such as natural gas and electricity, telephone and public services, such as water and sewer.

[25] For the Panel's report, the reference family was specifically defined as including a married couple with two of their own children.

[26] Citro and Michael, 1995, p. 101.

[27] Citro and Michael, 1995, pp.194-199.

[28] Citro and Michael, 1995, p. 148.

[29] Citro and Michael, 1995, p. 148.

procedure was to drive the change in the thresholds by changes in median spending on food, clothing, shelter, and utilities and not by changes below the median.[30]

It should be noted that in the construction of the thresholds out-of-pocket expenditures were used. However, the mechanism to update the thresholds was to be based on changes in consumption. Out-of-pocket expenditures for food and utilities are likely to represent consumption. Such expenditures are less likely to represent the consumption of clothing. The consumption of rental housing also is likely to be fairly well represented by rental expenditures.

Out-of-pocket expenditure for owner housing is not likely to be a good proxy for consumption. For example, if most housing were owner occupied and the owners had low or no mortgages, the expenditure approach would imply that these owners have no consumption of housing. If the Panel were attempting to provide a threshold based on the cost of the consumption, the out-of-pocket approach would not be a good model to follow. The Panel acknowledged this by stating that their approach was used for processing convenience only. The implicit cost of owned housing should be accounted for in the measure. If on the other hand, the purpose of the threshold were to provide an estimate of the expenditure that would be needed to meet the basic needs of the family, the out-of-pocket approach would be appropriate. In the Panel's report, expenditures, consumption, and needs are interchanged. However these are not the same. Until a decision is made concerning the focus of the thresholds (and corresponding resources) - expenditures, consumption, or needs - confusion will remain concerning the measure, especially with regard to the treatment of owner occupied housing.[31]

The Panel recommended that the thresholds be updated annually using an average of the most recent three years of CE data to produce the medians. The three-year average approach was recommended to increase the sample size and also to smooth out year-to-year changes in the thresholds; however this approach produces thresholds that lag behind changes in real consumption.[32] To conduct an analysis, the Panel used data from all consumer units participating in the CE in 1989-91. Each quarter approximately 5,000 consumer units[33] are interviewed using the CE Interview Survey. Based on the 1989-91 CE data, about 9 percent of all consumer units interviewed have the characteristics of the reference family, that is, the two-adult/two-child family.

First, median expenditures (adjusted to current dollars) for reference units are obtained using their FCSU expenditures. Second, percentages of the median are selected which reflect the reference households' expenditures between the 30th and 35th percentiles of the distribution of FCSU expenditures. These percentiles translate to 78 and 83 percent of the median. The Panel concluded in their study that these percentiles seem to represent a "reasonable range" for the FCSU component of the reference family's threshold.[34] Third, expenses for their other needs (e.g., household supplies, personal care, and non-work related expenses) are accounted for through the use of a small multiplier.

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[30]   If percentiles were used to define the thresholds, a situation could result in which a recession reduced median expenditures somewhat but more dramatically lowered the expenditure level at the 30th percentiles, for example. It would not be desirable for the poverty threshold or standard of need to reflect this greater reduction (Citro 1996).

[31]   See Short, Iceland, Bavier, Garner, Rozaklis, and Hernandez, "Report on Experimental Poverty Measures", in *Proceedings of the American Statistical Association*, (forthcoming).

[32]   Citro and Michael, 1995, Table 2-7, p. 156.

[33]   A consumer unit comprises either: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independen ; or (3) two or more persons living together who use their incomes to make joint expenditure decisions. Financial independence is determii ed by the three major expenses categories: housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided entirely or in part by the respondent.

[34]   Citro and Michael, 1995, p. 149.

As noted earlier, multipliers were applied to the value of the designated basic bundle (reflected as some percentage of the median of the basic bundle) to account for the additional costs of other needed commodities. The two bundles considered by the Panel reflect expenditures for the: (1) basic bundle plus those for personal care and one-half of transportation;[35] and (2) basic bundle plus personal care, one-half transportation, education, and reading materials costs.[36] In the report, the Panel stated that "we arbitrarily chose to exclude one-half of transportation costs because the Interview Survey does not distinguish between work expenses, which we propose to deduct from resources, and personal transportation for errands, vacations, etc."[37] This allocation is consistent with other studies.[38]

The Panel's determination of what to include in the additional amount was constrained by what was available in the Interview Survey (e.g., some personal care items and household supplies, which would seem natural candidates to include in the multiplier bundle, are only available from the Diary). However, a bigger point is that the Panel did not intend to engage in a detailed budget-building exercise; it simply wanted to try out a couple of reasonable multipliers to get a feel for a reasonable range for a small multiplier applied to a basic bundle.[39] Other commodity bundles could have been assumed.

The Panel concluded from a review of their tabulations that a reasonable range for the multiplier was 1.15 to 1.25, which allowed for a poverty threshold that ranged from $13,700 to $15,900 (in 1992 dollars rounded). The value is 78 percent of median expenditures for the basic bundle (corresponding to the 30th percentile) times 1.15 and the upper value is 83 percent of the median for the basic bundle (corresponding to the 35th percentile) times 1.25. The Panel chose their multipliers as corresponding to those at or below the median level of expenditures for the basic bundle. The general formula for deriving the proposed reference family threshold is shown in **Chart 1**.

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[35] *Transportation* expenditures were defined by the Panel to include vehicle finance charges, expenses for gasoline and motor oil, maintenance and repairs, vehicle insurance, public transportation (including air fares), and vehicle rentals, licenses and other charges. In addition, transportation included the total purchase price (minus the trade-in value) on new and used vehicles.

Personal care includes products for hair, oral hygiene, and shaving, cosmetics and bath products, electric personal care appliances, other personal care products, and personal care services.

[36] *Education* includes tuition, fees, textbooks, supplies and equipment for public and private nursery schools, elementary, and high schools, colleges, and universities, and others schools

Reading materials includes subscriptions for newspapers, magazines, and books through book clubs, purchase of single copy newspapers, and magazines, newsletters, books, encyclopedias, and other reference books.

[37] Citro and Michael, 1995, p. 151.

[38] In constructing the cost of raising a child, the Department of Agriculture used data from a 1990 study by the Department of Transportation which found that employment-related transportation activities account for about 40 percent of travel costs for families with children. See *Expenditures on Children by Families, 1995 Annual Report*, Center for Nutrition Policy and Promotion, USDA, page 5, and U.S. Department of Transportation, Federal Highway Administration, 1994, *1990 Nationwide Personal Transportation Study*.

[39] Citro 1996.

CHART 1
CALCULATION OF THRESHOLD FOR REFERENCE FAMILY

$$T = \left[\frac{(M1 * \%m) + (M2 * \%m)}{2} \right] * housing\ index \qquad (1)$$

where

T = the reference family poverty threshold,

$M1$ = the multiplier for a smaller additional amount, (1.15 for the Panel's estimate)

$M2$ = the multiplier for a larger additional amount, (1.25 for the Panel's estimate)

$\%$ = some percentage, (0.78 & 0.83 for the Panel's estimate), and

m = median expenditures for the basic bundle of food, clothing, shelter, and utilities.

Once the value for the basic bundle was determined the thresholds were adjusted to reflect geographic differences in the price of housing. Inter-area housing price indexes, calculated from the 1990 Census data on gross rent for apartments with specified characteristics, adjusted to reflect the share of housing in the proposed poverty budget, were used.[40]

Equivalence scale adjustments were next made to the reference family's threshold to account for the differing needs of adults and children and the economies of scale of living in larger families. After evaluating the equivalence scale implicit in the poverty thresholds and several forms of the thresholds, the Panel recommended a scale of the type shown in **Chart 2**.

CHART 2
TWO-PARAMETER EQUIVALENCE SCALE

$$Scale\ value = (A + PK)^F \qquad (2)$$

where A = the number of adults in the family,

K = the number of children, each of whom is treated as a proportion (P)

of an adult, and

F = the scale economy factor.

Specifically, the Panel recommended that P be set at 0.70 such that the needs of children are treated as 70 percent of those of an adult, and the scale economy factor, F, be set in the range of 0.65 to 0.75. The values of the resulting scale are consistent with the Rothbarth scales reported by Betson, and Betson and Michael.[41]

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[40]   For a description of the housing adjustment, see Citro and Michael, 1995, pp. 194-199, 249, 252-253.

[41]   See citations in Citro and Michael, page 177.

B.   Updating the thresholds over time

The NAS Panel recommended that the poverty thresholds, once determined, should be updated over time using the change in median expenditures for the basic bundle of goods (composed of FCSU) of the reference households (see Citro and Michael (1995)). This is one of the most controversial of the Panel's recommendations. Specifically, their recommendations were:

Recommendation 2.2 The new poverty thresholds should be updated each year to reflect changes in consumption of the basic goods and services contained in the poverty budget: determine the dollar value that represents the designated percentage of the median level of expenditures on the sum of food, clothing, and shelter for two-adult-two-child families and apply the designated multiplier. To smooth out year-to-year fluctuations and to lag the adjustment to some extent, perform the calculations for each year by averaging the most recent 3 years' worth of data from the Consumer Expenditure Survey, with the data for each of those years brought forward to the current period by using the change in the Consumer price Index.

Recommendation 2.3 When the new poverty threshold concept is first implemented and for several years thereafter, the Census Bureau should produce a second set of poverty rats for evaluation purposes by using the new thresholds updated only for price changes (rather than for changes in consumption of the basic goods and services in the poverty budget).

Recommendation 2.4 As part of implementing a new official U.S. poverty measure, the current threshold level for the reference family of two adults and two children ($14,228 in 1992 dollars) would be reevaluated and a new threshold level established with which to initiate a new series of poverty statistics. That re-evaluation should take account of both the new threshold concept and the real growth in consumption that has occurred since the official threshold was first set 30 years ago.

In their work the NAS panel examined historical data. Citing the work of Vaughan[42] they examined time series from 1947 to 1989 of relative thresholds over time. Looking at one-half median before-tax four-person family income they found an increase of 115 percent over this long period of time. After-tax income, however, increased only 86 percent over the same period. Compared with the official threshold, adjusted for price changes only, both before-tax and after-tax series were lower through the year 1955, at the same level through 1965, and then well above the threshold thereafter. This series suggested why, in 1963, when the original thresholds were devised, they were widely regarded at the right level for that time, while they are now often criticized for being too low.

The NAS Panel also examined subjective poverty thresholds over this same period using Gallup Poll data assembled by Vaughan (1993). These thresholds were derived from a get-along question and a "poverty line" question. These series show a similar relationship when compared to the official thresholds as the median income measures, suggesting that subjective thresholds respond to changes in real income or consumption. They suggest that if the elasticity of subjective thresholds with respect to changes in median income or consumption is very close to 1.0 that one could argue for a strictly relative approach to updating poverty thresholds. The NAS Panel cited research suggesting an elasticity between 0.65 (Vaughan, 1993) and 1.0 (Rainwater, 1992)[43].

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[42]   Vaughan, Denton R. "Exploring the use of the public's view to set income poverty thresholds and adjust the over time", in *Social Security Bulletin* 56(2), Summer 1992, pp. 22-46.

[43]   Rainwater, Lee, "Poverty in American Eyes", Luxembourg Income Study, Working Paper No. 80. Harvard University. 1992.

Based on this and other evidence the NAS Panel notes that "in developing a poverty standard, some reference is invariably made to the living conditions of the particular time and place. Given the evidence of relativity in the way in which poverty thresholds are commonly derived we conclude that the key point for consideration is not whether to treat poverty thresholds as absolute or relative, but rather, how often to update them for real changes in living standards."[44]

The Panel intended to use an adjustment factor would be a "quasi relative" updating mechanism. The Panel expected that the median basic bundle FCSU expenditures by the reference family would change at a different rate than inflation but by less than the change in consumption as measured by per capita Personal Consumption Expenditures (PCE).[45]

Chart 3 compares changes in median FCSU expenditures for the reference two-adult/two-child household, the all item CPI-U[46], and the PCE. As shown PCE increase faster than median FCSU expenditures, which increase faster than the CPI-U. These results seem to confirm the Panel's expectations regarding the use of the median FCSU as an updating mechanism.

Chart 3
Updating the Thresholds:
The Intuition Behind the Panel's Proposal
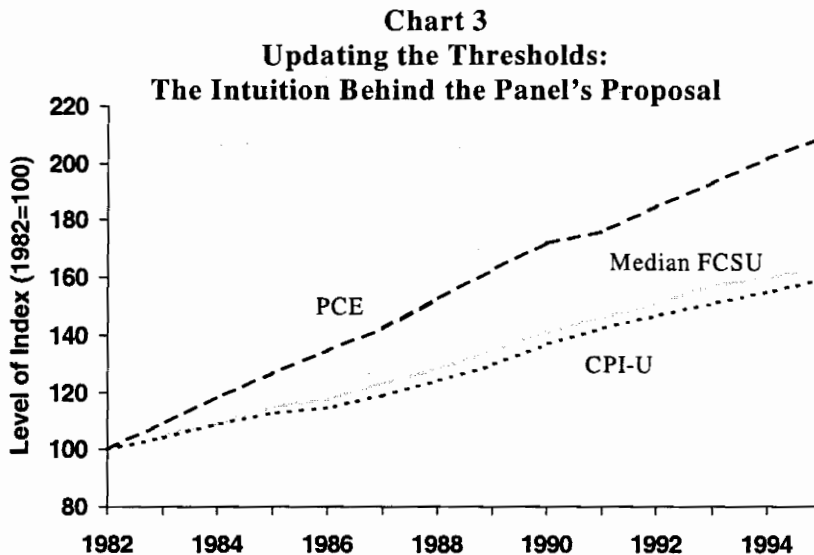
These results, however, may not hold for each year, because the change in the median is volatile. For example, using the inflation rate to adjust the 1990 threshold to 1995 yields a higher threshold than using the Panel's proposed method.

Chart 4 compares the annual changes between the percent changes in the median expenditures on FCSU for the two-adult/two-child reference unit and the inflation rate (using the CPI-U-X1). The changes in FCSU median expenditures track the inflation rate fairly closely; however, there are a few outliers

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[44]   Citro and Michael, pp. 131- 144.

[45]   For more discussion see Johnson, David, Stephanie Shipp, and Thesia Garner, "Developing Poverty Thresholds Using Expenditure Data," in *Proceedings of the Government and Social Statistics Sections* of the American Statistical Association, Alexandria, VA, August 1997, pp. 28-37.

[46]   U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January 1996. We also use the CPI-U-X1 for 1982. The new CPI-U definition, based on rental equivalency, was introduced in 1983.

(e.g., 1985, 1993, and 1994). The standard errors are also calculated for the change in the median expenditures for each year beginning with 1990 and ending with 1995.[47]

After the Panel published their report, concern was raised that the Panel's proposed updating method would be highly volatile and would have a large variance, especially when compared to the variance of the change in the CPI-U. As **Chart 4** shows, the standard errors for the changes in the median are fairly large (e.g., 2.3 percent in 1995) compared to the standard error for inflation (0.15 percent). The 90 percent confidence interval for the change in the median expenditures for 1995 is from 0.6 to 4.0 percent.

To reduce the variance in the rates of change, the rates of change for various household types can be calculated and the average of these rates used. Another way to reduce the variance would be to calculate the change in the median equivalent expenditures (i.e., household expenditures adjusted by an equivalence scale). Assuming that the changes for the different household types are not correlated, we find that the standard error falls by almost 50 percent for both alternative methods. These standard errors, however, are still larger than the standard errors of the inflation rate. These latter two methods also

Chart 4
Percent Changes in Median FCSU and inflation rate:
1983-95
(90% confidence interval shown by dotted lines)
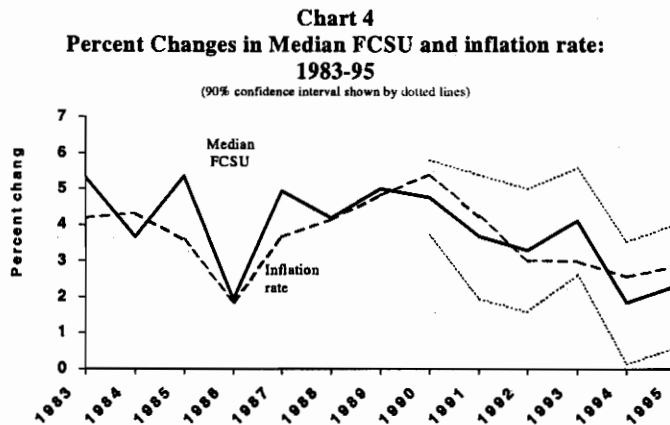
decrease the percentage change in the median for the 1990-95 years. This is because the median expenditures increase the most for the reference household.

TABLE 1
VARIOUS METHODS TO UPDATE THE THRESHOLD

Year	Change in median FCSU expenditures for reference household	Inflation rate	Average change in median for nine household types	Change in median equivalent FCSU for all households (using P=0.70 and F=0.65)
1990	4.8	5.4	4.8	4.7
1991	3.7	4.2	3.9	3.7
1992	3.3	3.0	1.9	1.9
1993	4.1	3.0	2.3	2.5
1994	1.8	2.6	2.3	2.4
1995	2.3	2.8	2.3	2.3
Average standard error	0.95	0.15	0.51	0.53
Percent change From 1990-95	21.7	22.9	18.9	18.7

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[47] These errors are produced using the replicate weights found in the CE Survey data file and half-samples for each of the three-year periods in our study. See interview microdata documentation (USDL2) for an explanation of how to use the replicate weights to produce variances.

IV.   INCOME OR RESOURCES

In addition to the poverty thresholds, the resource measure in the NAS recommendations takes account of changes in consumption over time. As the NAS Panel specified, three important expenditure items are subtracted from family income before poverty status is determined. These are work-related expenses, childcare expenses while parents are at work, and medical out-of-pocket expenses. While not explicitly included in the thresholds, these were considered to be necessary expenses by the NAS Panel. Insofar, as these expenses are updated in a timely way to capture changes in consumption patterns of these commodities, this measure of poverty is more responsive to changes in consumption patterns than is observable from examining only the thresholds.

V.   POVERTY ESTIMATES 1990 TO 1998

In this paper, as in our report[48], we have followed the NAS Panel's recommendation to produce time-series of poverty rates using two sets of experimental thresholds. One set is adjusted from year to year by the change in median expenditures on the basic bundle of goods, which include food, clothing, shelter, and utilities (FCSU). These FCSU estimates are based on three-year moving averages of the median expenditures of the two-adult two-child family as estimated from the CE. The second set changes from year to year by changes in the Consumer Price Index (CPI-U) (see **Table 2**). This set is based on the FCSU threshold for 1997, while thresholds for other years are based only on changes in the CPI-U from 1997.

TABLE 2
EXPERIMENTAL THRESHOLDS USING ALTERNATIVE UPDATING METHODS: 1990-1998
(1997 as base year)

Year	Current Official Threshold	FCSU Change in median FCSU	FCSU 1998 Backdated with CPI-U
1990	$13,254	$13,342	$13,028
1991	$13,812	$13,843	$13,576
1992	$14,228	$14,253	$13,985
1993	$14,654	$14,791	$14,403
1994	$15,029	$15,166	$14,772
1995	$15,455	$15,545	$15,191
1996	$15,911	$15,744	$15,639
1997	$16,276	$15,998	$15,998
1998	$16,530	$16,401	$16,248

Source: Short, Iceland and Garner, 1999.[49]

[48]   Short, Kathleen, Thesia Garner, David Johnson, and Patricia Doyle, *Experimental Poverty Measures: 1990 to 1997,* U.S. Census Bureau, Current Population Reports, Consumer Income, P60-205, U.S. Government printing office, Washington, D.C., 1999.

[49]   Short, Kathleen, John Iceland, and Thesia Garner, "Experimental Poverty Measures: 1998", unpublished paper available at http://www.census.gov/poverty/povmeas/exppov/exppov.html.

As can be seen in the table, the 1997 experimental thresholds are the same, by design, and slightly lower than the official thresholds. Also, the 1998 experimental threshold based on FCSU estimates from the CE is slightly higher than that based only on the CPI-U, suggesting that spending for the basic bundle rose more from 1997 to 1998 than price changes. However, this is not always the case, as can be seen in **Chart 5.**

Thresholds: 1990-1998
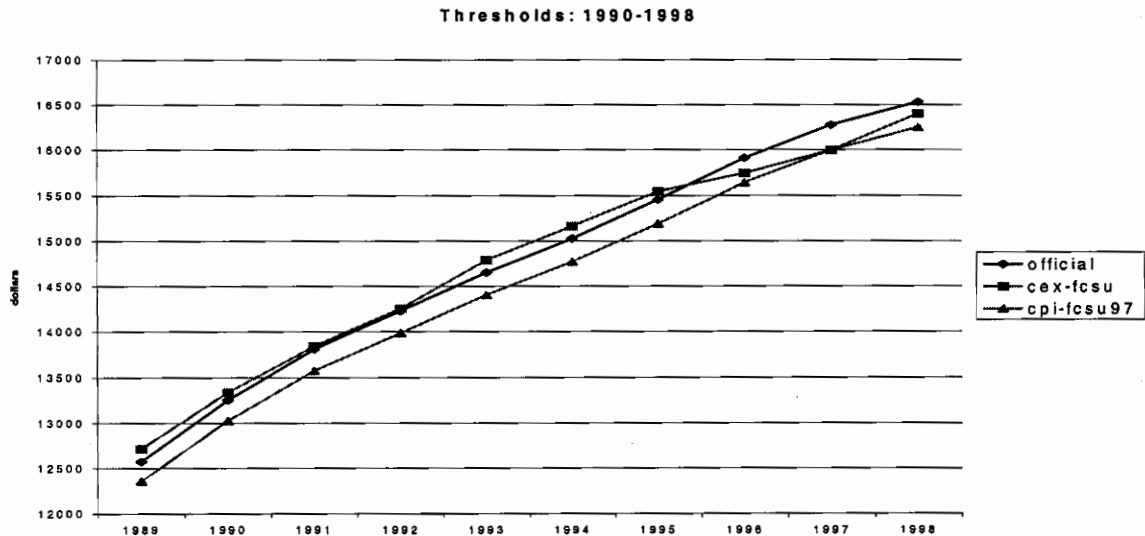
The chart shows the general increased variability in the thresholds that are based on the CE relative to those based on the CPI-U changes. While the trends are similar, generally the FCSU thresholds increased more slowly from 1994 to 1997 increased a bit faster from 1992 to 1993 and from 1997 to 1998. While the differences are slight and very probably not statistically significant, they can have an important effect on our estimates of trends in poverty rates over time.

We construct two separate time series of poverty rates using the above thresholds. The first one uses three–year averages from the CE to estimate thresholds for each year from 1990 to 1998. The second series uses the same threshold as the first for the year 1997, but then generates a new set of thresholds based only on changes in the CPI-U between years. Both sets of thresholds are shown in Table 2 for the reference two-adult two-child family.

In our report we constructed six basic experimental measures. We show only three of those here. We refer to these three measures as the NAS, DES-DCM2, and the NAS-NGA measures, respectively. The first measure we refer to as the NAS measure. We calculated it by closely following the methods outlined in the NAS panel's report. While there are a few minor differences from the measure the panel recommended, they are computational rather than conceptual in nature. In both the panel's report and here this measure is constructed in the following way[50]:

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[50]   All measures shown here use the family as the unit of analysis. See Short et al. (1999) for more details on the construction of these measures.

Thresholds:

- Thresholds are set at the midpoints of the ranges recommended by the NAS panel – averaged over the three most recent years – i.e., data for 1995, 1996, and 1997 are averaged for the 1997 threshold
- The equivalence scale is a two-parameter version
- Geographic indexes are those listed in the panel report (normalized)

Resources:

- Include the value of food assistance programs
- Include the value of housing subsidies
- Include the value of energy assistance (only heating assistance in this implementation)
- Subtract work-related and childcare expenses using the panel's childcare model
- Take account of taxes as modeled in the CPS
- Subtract medical out-of-pocket expenses (MOOP), modeled and calibrated to spending totals

We refer to the second experimental measure as DES-DCM2. This measure is constructed like the NAS measure, but we use a <u>D</u>ifferent <u>E</u>quivalence <u>S</u>cale. We use a three-parameter equivalence scale here that is arguably a more refined equivalence scale than the two-parameter one the panel used. DCM2 refers to <u>D</u>ifferent <u>C</u>hildcare <u>M</u>ethod. This measure uses amounts based on deductions for necessary childcare in the former Aid to Families with Dependent Children (AFDC) and Food Stamp programs. DCM2 is similar to the panel's method in its effect on poverty estimates but is easier to implement.

Finally we show the NAS measure without a geographic adjustment. This measure is referred to as NAS-NGA. This measure is calculated exactly as the NAS measure but the thresholds are <u>not</u> adjusted for differences in the cost of housing in different parts of the country. The geographic adjustment is excluded because, as the panel noted, this element requires more research and better data sources. These measures, then, adopt the assumption that the cost of meeting basic needs does not vary by geographic area.

Here we examine only "standardized" poverty rates. For these standardized measures, as in our report, the experimental poverty thresholds are adjusted to produce the same rate as the official rate for 1997 for each experimental measure. Thresholds for each of the measures for the other years in the series are adjusted by that same factor. Thus, they do not necessarily match the official rate in the other years. Each measure is adjusted separately and the factors vary depending upon the difference between the experimental measure and the official measure in 1997. This approach allows us to examine trends in the rates while essentially holding the level of all measures constant in 1997.[51] These standardized rates for 1990 through 1998 are shown in Table 3.

TABLE 3
POVERTY RATES STANDARDIZED TO 1997 OFFICIAL RATE (CE BASED THRESHOLDS): 1990 TO 1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Official	13.5	14.2	14.8	15.1	14.6	13.8	13.7	13.3	12.7
NAS	14.3	14.9	15.6	16.5	15.3	14.3	13.7	13.3	12.6
DES-DCM2	14.2	14.8	15.6	16.4	15.2	14.4	13.8	13.3	12.6
NAS-NGA	14.4	15.1	15.7	16.5	15.3	14.5	13.7	13.3	12.5

Source: U.S. Census Bureau, Current Population Survey, March 199'-1999.

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[51] We base the analysis in 1997 to maintain consistency with the results in the Census Bureau report.

Figure 1 shows poverty rates for 1998 using the official measure and three of the standardized experimental poverty measures using thresholds updated with CE data. The figure shows that, over the 1990-98 period, rates under the official and experimental measures behave similarly: increasing over the 1990-93 period and decreasing over the 1993-98 period. The official rate rose from 13.5 percent to 15.1 percent from 1990 to 1993 and fell to 12.7 percent by 1998. All of the standardized experimental rates show similar patterns with only some slight differences.

In 1990, all of the poverty rates under the experimental measures are higher than that of the official measure. The increase in poverty rates from 1990 to 1993, however, is similar across all the measures, including the official one. All of the experimental rates, while constrained to be equal in 1997 are higher than the official rate in 1993, suggesting that these measures declined at a faster rate over this period than the official measure. One important reason for the accelerated decline in the experimental poverty rates in this later period was the effect of an expanded Earned Income Credit (EIC), a tax program that is not accounted for in the official poverty measure.

Figure 1: Standardized Poverty Rates with CE-Based Thresholds
1990 - 1998
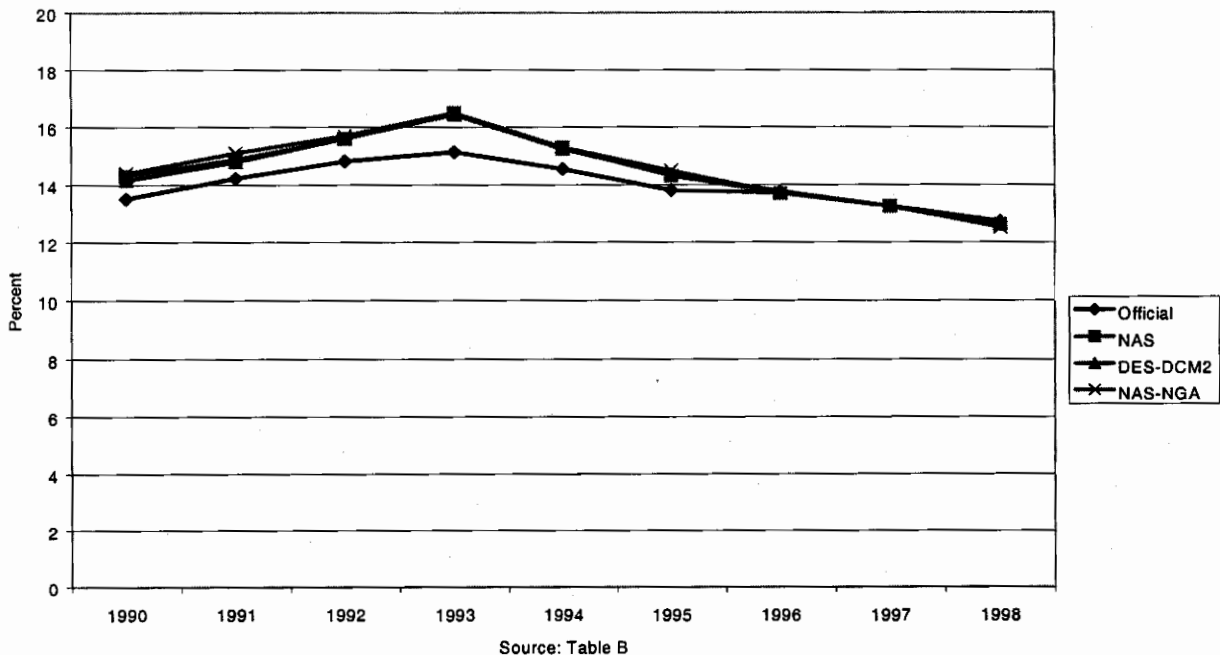
Source: Table B

NAS--National Academy of Sciences
DES-DCM2--Childcare method based on AFDC program allowances and three-parameter equivalence scale
NAS-NGA--NAS measure with no geographic adjustment

Figure 2 shows trends based on varying the thresholds from year to year with changes in the CPI-U only. Here we see again that the trends of the experimental measures are similar to the official measure from 1990 to 1993 with a greater decline from 1993 to 1998 than the official measure. Even though the figure shows that most of the 1998 standardized experimental estimates are slightly below the official rate, the decline from 1997 to 1998 is not statistically different among the various measures.

Figure 2: Standardized Poverty Rates with Thresholds Adjusted from 1997 with CPI-U: 1990-1998
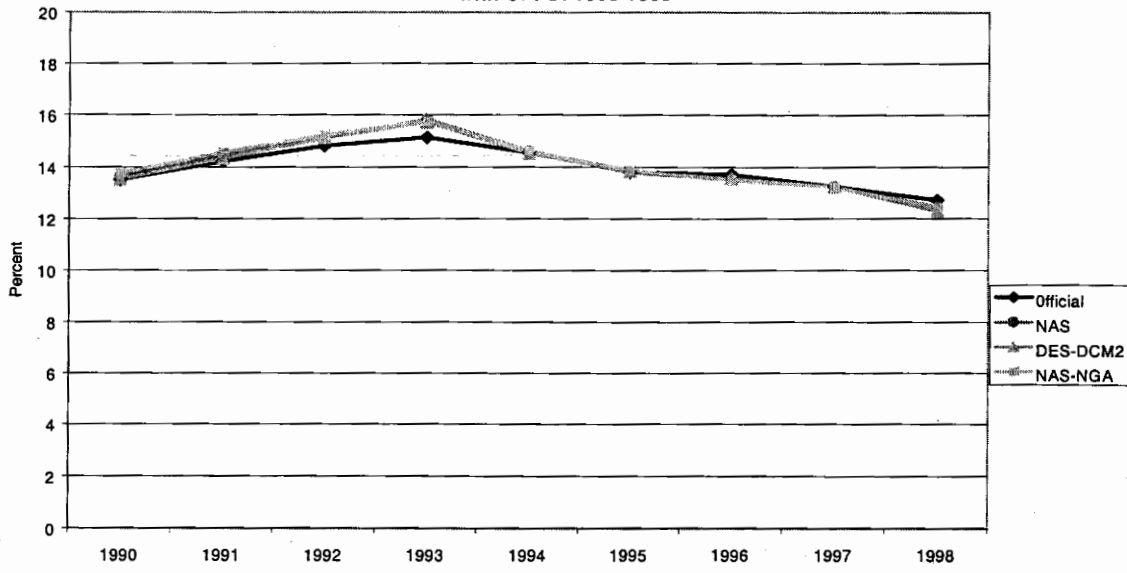
Source: Table D

NAS--National Academy of Sciences
DES-DCM2--Childcare method based on AFDC program allowances and three-parameter equivalence scale
NAS-NGA--NAS measure with no geographic adjustment

Figure 3 shows the difference between the two updating methods more clearly. Looking only at the NAS measure using the two updating methods shows that both measures follow a similar trend over the period. While the measure updated with the CE appear to be above the measure updated for price changes over this time period, increases from 1990 to 1993 and overall decreases in poverty rates across the period from 1993 to 1998 are not statistically different using the two measures.

Figure 3: Standardized Poverty Rates with Year-to-Year Changes in Thresholds based on CE and CPI-U: 1990 - 1998
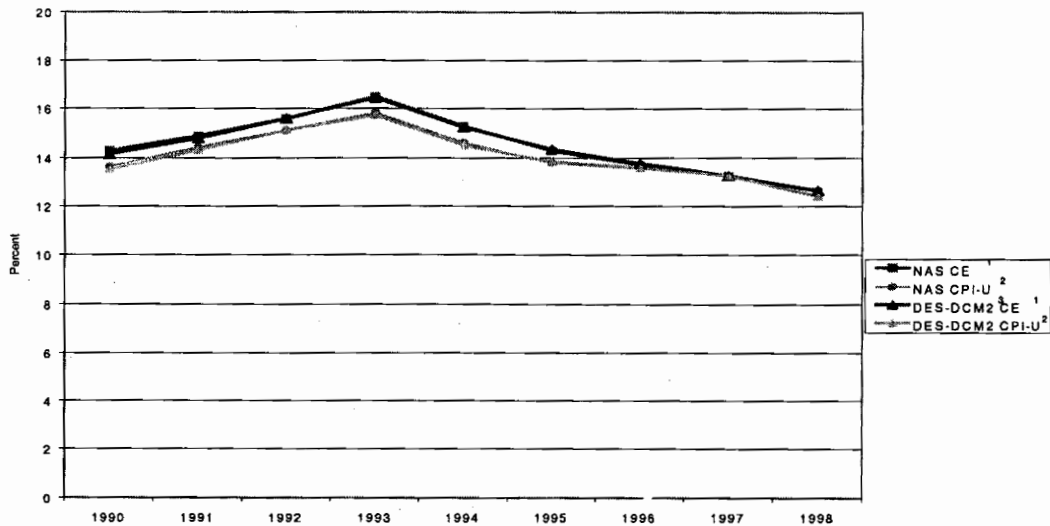
Source: Tables B and D
1. Threshold in all years based on Consumer Expenditure Survey (CE) data.
2. Thresholds in 1997 based on CE, other years adjusted from 1997 by change in Consumer Price Index (CPI-U).
3. NAS measure with different childcare valuation and different equivalence scale.

VI.   SUMMARY AND CONCLUSIONS

In this paper we have described experimental poverty measures that have been computed for the United States. These measures have been based on recommendations from our National Academy of Sciences and have been presented in a recent Census Bureau report released in July of this year.

This paper describes the recommendations that the NAS Panel had relating to updating poverty thresholds over time. That group recommended a different method from that currently used to update the official poverty threshold in the U.S. The current method increases poverty thresholds originally designed in the 1960s by changes in prices as measured by the Consumer Price Index for all items (CPI-U).

The NAS Panel recommended what they referred to as a "hybrid" or "quasi relative" approach, that incorporates changes in spending on a basic bundle of goods rather than changes in prices, in total consumption of all goods, or in income.

The paper then presented poverty thresholds calculated over the period from 1990 to 1998 in this recommended way, as well as, an additional set of thresholds that change from year to year based on the CPI-U. We then calculate experimental poverty rates based on these two sets of thresholds and compare trends over this short time period in the two measures. We show that, at least over these nine years of data, there are no statistically significant differences in the two experimental measures, while the experimental measures do differ slightly from the official measure in showing a greater decline from 1993 to 1998.

Opções Metodológicas para a Estimação de Linhas de Indigência e de Pobreza no Brasil

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CONTENTS

1. INTRODUÇÃO

Uma vez reconhecida a importância da renda como principal determinante do nível de bem-estar da população, o parâmetro denominado linha de pobreza (LP) passa a desempenhar papel central na determinação da incidência de pobreza no que ela depende da capacidade de consumo no âmbito privado. O parâmetro serve ainda como crivo de referência para a caracterização dos pobres em relação a outros aspectos da qualidade de vida não diretamente dependentes da renda, mas que têm papel fundamental na determinação do nível de bem-estar, como as condições de acesso a serviços públicos básicos.

Embora tenha sido relativamente comum a utilização de múltiplos de salário mínimo como linha de pobreza no Brasil[2], existe consenso de que, havendo disponibilidade de informações sobre a estrutura de consumo das famílias, esta é a fonte mais adequada para o estabelecimento de linhas de pobreza. A opção pelo consumo observado implica, ainda, deixar de lado a determinação da linha de pobreza utilizando procedimentos de otimização da cesta alimentar a partir de informações sobre o conteúdo nutricional e o preço dos alimentos. É amplamente reconhecido que escolhas realizadas pelas famílias em relação ao consumo alimentar, dada sua restrição de renda, se diferenciam marcadamente da cesta obtida a partir da minimização de custo. Isto ocorre mesmo quando se introduzem restrições no modelo de modo a garantir a variedade dos itens alimentares que compõem a cesta, assim como manter as quantidades por item dentro de limites aceitáveis de palatabilidade. O que se observa ao comparar os resultados do Estudo Nacional da Despesa Familiar (ENDEF/IBGE), realizado em 1974/1975, e da Pesquisa de Orçamentos Familiares (POF/IBGE) de 1987/88, é que, com a urbanização e a melhoria dos meios de comunicação, as escolhas alimentares das famílias têm se tornado cada vez menos ótimas quando se consideram estritamente o aporte nutricional e o preço dos alimentos.[3] Isto significa que outras variáveis são relevantes para o consumidor ao fazer a escolha de sua cesta alimentar, como a praticidade do produto ou seu apelo como bem de qualidade superior. Resulta que o custo da cesta alimentar para as populações de mais baixa renda tem, ao longo do tempo, seu valor aumentado bem acima do índice de preço da alimentação devido à mudança da estrutura da cesta em favor de produtos de preço mais elevado e/ou relativamente pouco eficientes no atendimento das necessidades nutricionais.

Esta mudança nas preferências deve ser captada na medida em que reflete um componente de pobreza relativa essencial para a mensuração da pobreza em uma sociedade marcada por importantes desigualdades de renda. Assim, faz sentido estabelecer a linha de pobreza a partir de estruturas de consumo observadas, cujo valor estaria associado ao mínimo necessário para que um indivíduo funcione adequadamente na referida sociedade.

Uma vez feita esta opção pela primazia do consumo observado, as etapas a seguir para o estabelecimento de LPs são simples e bem conhecidas. A primeira etapa consiste em determinar, para a população em questão, quais são suas necessidades nutricionais. A etapa seguinte objetiva derivar, a partir das informações de pesquisa de orçamentos familiares, a cesta alimentar de menor custo que atenda às necessidades nutricionais estimadas. O valor correspondente a esta cesta é a chamada linha de indigência (LI), parâmetro de valor associado ao consumo alimentar mínimo necessário. Como não se dispõe de normas que permitam estabelecer qual o consumo mínimo adequado de itens não-alimentares, o valor associado a eles é obtido de forma simplificada, correspondendo geralmente à despesa não-alimentar observada quando o consumo alimentar adequado é atingido.

Esta metodologia simples encobre uma ampla gama de possibilidades empíricas a cada etapa quando se trata de efetivamente estimar os valores das LIs e LPs. São as opções diversas adotadas a cada

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[2] Sobre o uso de linhas de pobreza como múltiplos do salário mínimo ver Rocha (1996).

[3] Rocha (1995).

etapa, assim como os procedimentos de atualização dos valores estabelecidos inicialmente a preços do período de referência, que resultam em parâmetros distintos para uma mesma área a partir da mesma base de dados. Naturalmente a adoção de linhas diferentes para uma mesma unidade geográfica conduz a resultados diversos em termos dos indicadores de incidência de indigência e de pobreza do ponto de vista da renda, assim como do perfil das sub-populações formadas por indivíduos indigentes e pobres delimitadas a partir destes parâmetros. É evidente que os resultados obtidos em termos de indicadores de indigência e de pobreza devem ser entendidos e analisados tendo em mente os parâmetros de renda, e mais do que isso, as premissas utilizadas na sua construção.

Este texto tem como objetivo apresentar as principais opções metodológicas para a determinação de linhas de pobreza no Brasil a partir do consumo observado, tendo por base as pesquisas de orçamento familiar do IBGE. Trata-se de ilustrar, a partir de dados concretos, como escolhas diversas podem influir no valor final do parâmetro obtido, e , em conseqüência, nas estimativas sobre incidência de indigência e pobreza no Brasil.

O texto a seguir refere-se às diferentes etapas de construção da linha de pobreza. A seção seguinte enfoca a determinação das necessidades calóricas, ponto de partida de todo o procedimento. Na seção 3 trata-se do estabelecimento da cesta alimentar. Formas de valoração da cesta não-alimentar são tratadas na seção 4. A seção 5 refere-se à estimação dos valores para áreas não-metropolitanas, enquanto a seção 6 trata da atualização dos valores de referência. Finalmente a última seção sumaria as principais conclusões, enfatizando a importância dos desvios no valor dos parâmetros estimados com base em diferentes escolhas metodológicas.

2.   AS NECESSIDADES NUTRICIONAIS COMO PONTO DE PARTIDA

A utilização das necessidades nutricionais para o estabelecimento da cesta alimentar básica vem sendo mantida e aperfeiçoada ao longo do tempo por ser o fundamento conceitual mais sólido quando se trata da estimação de linhas de pobreza. Os parâmetros periodicamente divulgados pela FAO relativos às necessidades dos diferentes nutrientes dadas as características dos indivíduos, tanto físicas (idade, sexo, peso/altura), como de atividade (conforme desempenhe atividade leve, moderada ou pesada), são utilizados como base para o estabelecimento das necessidades nutricionais médias da população que se deseja estudar em relação à incidência de pobreza. Entende-se como indigentes, por se situarem abaixo da linha de indigência, aqueles cuja renda é insuficiente para adquirir a cesta alimentar que permite atender às suas necessidades nutricionais.[4]

Utilizam-se no Brasil somente as necessidades calóricas, ao invés de toda a gama de necessidades nutricionais (proteínas, vitaminas, minerais). Isto se justifica pelo fato de que estudos baseados no ENDEF e na POF1987/1988 mostram que as calorias se constituem no elemento restritivo, sendo portanto, suficiente escolher uma dieta observada que garanta os requisitos calóricos para que as necessidades dos outros nutrientes sejam satisfeitas.

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[4]   Deve-se lembrar que a definição de pobreza como insuficiência de renda nada revela sobre as condições de nutrição da população, já que, em momento algum, se utilizam parâmetros antropométricos, indispensáveis para fornecer evidências neste sentido.

TABELA 1
ESTIMATIVAS DE NECESSIDADES CALÓRICAS RECOMENDADAS (*)
kcal/per capita/dia

Regiões Metropolitanas	CEPAL (1991)	Ellwanger (1992)	Feres (1996)	Lustosa (1999)
Belém	2.142,8	2.055	2.191	2.160
Fortaleza	2.126,0	2.047	2.200	2.098
Recife	2.126,0	2.071	2.200	2.126
Salvador	2.126,0	2.043	2.200	2.127
Belo Horizonte	2.198,5	2.144	2.288	2.233
Rio de Janeiro	2.213,7	2.123	2.288	2.233
São Paulo	2.152,4	2.135	2.288	2.233
Curitiba	2.217,6	2.120	2.313	2.282
Porto Alegre	2.217,6	2.128	2.313	2.284
Brasília	2.154,8	2.073	2.259	2.198

(*) Todas as estimativas se baseiam nas recomendações da FAO (1985)

É interessante observar que os parâmetros estabelecidos pela FAO em termos de necessidades calóricas vêm declinando ao longo do tempo, isto é, para quaisquer que sejam as características dos indivíduos, suas necessidades calóricas determinadas hoje são inferiores àquelas definidas a partir dos parâmetros anteriores.[5] Isto resulta, necessariamente, em redução nas estimativas elaboradas com base nas recomendações atuais, que datam de 1985, em relação às anteriores, divulgadas em 1973.[6] Os desvios entre as estimativas de necessidades calóricas elaboradas por diversos autores com base nas recomendações de 1985 são pequenos, mesmo quando utilizam informação estatística de fontes e anos diversos em relação à composição da população por idade e sexo da população, já que esses parâmetros demográficos se alteram lentamente e sua interpretação é inequívoca.[7] No entanto, diferenças sensíveis entre estimativas podem decorrer de formas distintas de classificar as atividades ocupacionais dos indivíduos como leves, moderadas ou pesadas, assim como estabelecer o seu uso do tempo e a correspondente necessidade calórica em 24 horas. As diferenças entre necessidades calóricas, que chegam a 9% em Brasília quando se consideram as estimativas de Ellwanger (1992) e de Feres (1996) (Tabela 1), implicam, provavelmente, diferenciais ainda maiores dos valores das cestas alimentares observadas capazes de atender a essas necessidades, dado que, conforme aumenta a despesa alimentar das famílias, aumenta também o custo calórico unitário. As opções relativas à forma de estimar as necessidades calóricas poderão ter, portanto, impactos significativos sobre as medidas finais de incidência de indigência e de pobreza.

3.   A DETERMINAÇÃO DA CESTA ALIMENTAR

Uma vez determinadas as necessidades calóricas médias de uma determinada área, região metropolitana de São Paulo, por exemplo, trata-se de obter a cesta alimentar observada de menor custo que permita o atendimento dessas necessidades.

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[5]   FAO (1973) e (1985).

[6]   Para as estimativas de necessidades calóricas baseadas em parâmetros anteriores (FAO,1973) elaboradas por Thomas (1983) e Martins e Hidalgo (1984), ver Rocha, 1997 (Anexo).

[7]   As estimativas da CEPAL e de Feres se referem a médias regionais, resultando em necessidades calóricas idênticas para, por um lado, as três metrópoles nordestinas, por outro lado, para as duas metrópoles da Região Sul, enquanto Ellwanger e Lustosa geram parâmetros específicos compatíveis com o nível de detalhamento da informação de consumo da POF.

Para isso é preciso, em primeiro lugar, derivar o aporte calórico per capita da cesta alimentar observada em cada família residente na área. Isto é feito com base na composição dos alimentos, obtendo-se como resultado a estimativa do consumo calórico per capita diário naquela família.[8] Uma vez as famílias ordenadas em função crescente do seu consumo calórico per capita, busca-se identificar o intervalo de despesa alimentar mais baixo para o qual a necessidade calórica é atendida.

O Gráfico 1 ilustra o procedimento com base nos resultados obtidos por décimos da distribuição de despesas correntes para a metrópole do Rio de Janeiro. No caso, poderia ser adotada a cesta alimentar do quarto décimo, ajustando-se proporcionalmente as quantidades de alimentos para corresponder exatamente a 2123 kcal/dia, se fosse utilizada a necessidade calórica estimada por Ellwanger para aquela metrópole. Um procedimento mais elegante consiste em trabalhar com 91 décimos móveis, de modo a obter uma cesta observada com aporte calórico mais próximo das necessidades recomendadas, requerendo, portanto, um ajuste menor.[9] É importante notar, no entanto, que a adoção de uma ou outra alternativa tem impacto marginal sobre a estrutura da cesta alimentar e sobre o valor da linha de indigência obtida.

Tendo por base as informações de despesa, tanto do ENDEF como da POF1987/1988, a adoção das cestas alimentares observadas, que correspondem à ingestão recomendada de calorias, leva a delimitar como indigente uma percentagem muito elevada da população, especialmente no Nordeste (Tabela 2). Para evitar este resultado, que implicaria em usar parâmetros de renda elevados, portanto de pouca utilidade para delimitar uma população prioritária para fins de políticas sociais, autores tem recorrido a procedimentos diversos visando a redução do valor da cesta alimentar, sem que isto signifique abandonar o princípio essencial de utilização do consumo alimentar observado.

GRÁFICO 1
INGESTÃO CALÓRICA MÉDIA OBSERVADA E RECOMENDADA
POR DÉCIMO DA DISTRIBUIÇÃO DE DESPESA CORRENTE
Metrópole do Rio de Janeiro
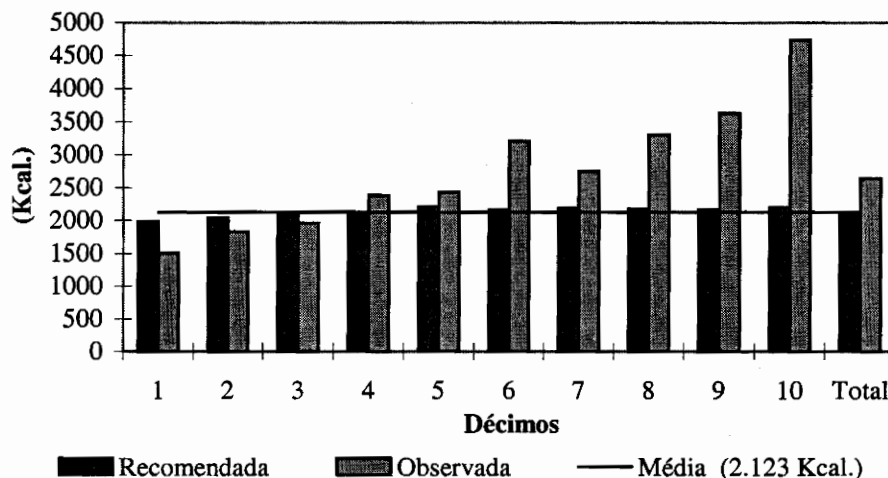
Fonte: IBGE/POF 1987/1988

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[8] A "Tabela de Composição de Alimentos" (IBGE/ENDEF, 1977), fornece os coeficientes relevantes para obter tanto o percentual aproveitável da quantidade adquirida de cada alimento, como seu aporte nutricional por cada 100 gramas de parte comestível.

[9] Este procedimento com base nos décimos s móveis foi proposto por Ricardo Paes e Barros no âmbito da comissão mista IBGE, IPEA e CEPAL que estuda a metodologia a adotar para o estabelecimento de linhas de pobreza a partir da POF 1995/1996.

Fava (1984) tomou como base, arbitrariamente, a cesta alimentar relativa ao segundo décimo da distribuição das despesas correntes do ENDEF, as quais, em todas as 23 áreas, estavam aquém do atendimento das necessidades calóricas. Estas cestas foram então ajustadas na sua composição de modo a atingir as recomendações calóricas. Thomas (1983) utilizando também dados do ENDEF, além de recorrer a um procedimento semelhante ao de Fava, mas baseado na cesta do $20°$ percentil, propõe ainda uma alternativa: adotar como ponto de partida a cesta de equilíbrio, isto é, aquela de menor custo que garante o atendimento da recomendação calórica, da qual seleciona os principais produtos responsáveis pelo seu aporte calórico até atingir 75% do total das necessidades recomendadas. As quantidades dos alimentos selecionados são então aumentadas proporcionalmente de modo a atingir 100% das necessidades calóricas recomendadas, o que se dá a um custo inferior ao da cesta original. Ellwanger $(1991)^{10}$, com base na POF 1987/1988, utiliza como ponto de partida as cestas de alimentos que atendem às recomendações calóricas mínimas, isto é, aquelas necessárias tão somente à manutenção do funcionamento do metabolismo basal e que se situam em torno de 1750 kcal/dia. As quantidades de alimentos constantes desta cesta, que tem um custo calórico unitário mais baixo, são então ajustadas proporcionalmente de modo a obter a cesta atingindo o padrão calórico recomendado.

TABELA 2
CONSUMO CALÓRICO RECOMENDADO E
DÉCIMOS DA DISTRIBUIÇÃO MAIS BAIXA ONDE É ATINGIDO
Regiões Metropolitanas - 1974/74 e 1987/88

Regiões	Ellwanger (1991)	
Metropolitanas	kcal	Décimo
Belém	2.055	4º
Fortaleza	2.047	5º
Recife	2.071	6º
Salvador	2.043	5º
Belo Horizonte	2.144	2º
Rio de Janeiro	2.123	4º
São Paulo	2.135	3º
Curitiba	2.120	2º
Porto Alegre	2.128	4º
Goiânia	2.091	4º
Brasília	2.073	3º

Fonte: Ellwanger (1991).

Os procedimentos descritos se afastam da solução mais direta: a adoção da cesta observada que garante a ingestão calórica recomendada. O que se busca é a determinação de parâmetros de valor operacionais para fins de monitoramento de indigência e da pobreza. Todos são arbitrários na medida que, introduzindo algum grau de normatização, se afastam do consumo observado.

A Tabela 3 ilustra com dados da POF1987/1988 a adoção de três diferentes procedimentos para estabelecer o valor da cesta alimentar nas metrópoles do Recife e de São Paulo. As necessidades calóricas recomendadas, 2071 kcal/dia no Recife e 2135 kcal/dia em São Paulo são atingidas em qualquer das três opções examinadas, mas as soluções se diferenciam pelo grau de normatização adotado na sua derivação a partir de cestas observadas, o que afeta a sua composição (a composição das cestas relativas à metrópole de São Paulo é apresentada no Anexo 1) e seu custo. O menor custo corresponde a uma cesta que se limita aos alimentos de maior aporte calórico, a qual, é interessante observar, apresenta custo

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[10] Rocha (1993) utiliza cestas de Ellwanger.

inferior até mesmo ao da cesta observada que permite apenas atender às necessidades calóricas mínimas. A cesta de custo intermediário resulta do ajustamento das quantidades dos alimentos da cesta que originalmente permitia atingir apenas as necessidades mínimas.[11] O valor mais alto corresponde à cesta observada que atinge sem qualquer ajuste as necessidades recomendadas. É importante destacar que opções metodologicamente diversas conduzem a desvios entre os valores da cesta que podem chegar a 50% como ocorre no caso de São Paulo.

TABELA 3
COMPARAÇÃO DOS VALORES DAS CESTAS ALIMENTARES
OBTIDAS PARA TRÊS PROCEDIMENTOS DISTINTOS DE DERIVAÇÃO
Recife e São Paulo - preços de outubro de 1987

	Valores (Cz$)		Comparação relativa	
	Recife	**São Paulo**	**Recife**	**São Paulo**
Necessidades Mínimas *	848,40	838,01	102	106
Necessidades Recomendadas**				
Mínimo ajustado 90% do aporte calórico	833,43	793,85	100	100
Mínimo ajustado via cesta completa	1.007,55	1.042,15	121	131
Observado	1.111,28	1.188,98	133	150

Fonte: Rocha, 1993; Ellwanger, 1992.
* Recife, 1750 kcal/dia; São Paulo, 1786 kcal/dia.
** Recife, 2071 kcal/dia; São Paulo, 2135 kcal/dia.

Uma vez derivada a cesta alimentar[12], isto é, o conjunto de alimentos e respectivas quantidades que permite atender às necessidades calóricas recomendadas médias em cada área, trata-se de adotar os preços relevantes. No caso do ENDEF, a solução natural foi utilizar os preços do próprio ENDEF, já que o inquérito tinha investigado despesa e quantidade. Ademais, não existia na época um sistema de índice de preços de abrangência nacional e com características técnicas, cuja utilização fosse vantajosa em relação aos preços do ENDEF. A POF1987/1988, no entanto, só investigou despesa, de modo que a solução mais adequada no caso foi recorrer às informações de preços do Sistema Nacional de Índices de Preços ao Consumidor (SNIPC/IBGE). A recente POF1995/1996 investiga de novo as quantidades associadas a cada despesa alimentar, o que talvez permita um tratamento mais direto dos preços.

A questão de atualização do valor da cesta alimentar, expressa inicialmente para o período de referência, suscita considerações específicas que serão feitas na seção 6.

4.   A ESTIMAÇÃO DO CONSUMO NÃO-ALIMENTAR

Contrariamente ao que ocorre em relação ao consumo alimentar, para o qual se dispõem de parâmetros exógenos relativos aos níveis de consumo mínimo, não existem normas para definir o consumo adequado de itens de vestiário, habitação, transporte, saúde, educação, etc., nem tampouco um procedimento direto para estimação da despesa mínima com esses itens.

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[11]   E este o procedimento utilizado por Rocha (1993) a partir de dados da POF.

[12]   À guisa de exemplo, a cesta alimentar que permite atingir as necessidades nutricionais na metrópole de São Paulo, segundo a POF 1987/1988, é composta de 125 produtos alimentares e a que atende às necessidades mínimas 108 produtos. Para reduzir o número de produtos, o que facilita o tratamento empírico, é comum eliminarem-se aqueles pouco relevantes cujo consumo médio é inferior a 1gr/dia.

Como resultado, ao definir a linha de pobreza, a ênfase conceitual e analítica recai na definição das necessidades nutricionais e na estimação das cestas alimentares. Embora as demais despesas representem, em países do nível de desenvolvimento do Brasil, mais da metade das necessidades básicas, são habitualmente tratadas de forma agregada e simplificada.

A literatura sobre pobreza consagrou a adoção do coeficiente de Engel, isto é, a relação entre despesas alimentares e despesa total, como um elemento central na determinação da linha de pobreza, apesar da sua evidente fragilidade conceitual e empírica para este fim. O procedimento, que ainda é o mais habitual na prática internacional, consiste em assumir como adequado para fins de determinação da linha de pobreza o valor da despesa não-alimentar observado no intervalo da distribuição mais baixo no qual a despesa alimentar atende às necessidades nutricionais (ver Tabela 2).

Desde o ENDEF as evidências empíricas são no sentido de que as despesas alimentares no Brasil representam um percentual relativamente baixo da despesa total, mesmo para os mais pobres. Esta "especificidade brasileira" – especialistas que trabalham com dados de diferentes países insistem que, para os pobres, esta relação se situa em torno de 0,5 - foi confirmada nas POF's de 1987/1988 e 1995/1996. A Tabela 4 apresenta os coeficientes de Engel médio na base da distribuição de despesas no ENDEF e na POF1987/1988.

TABELA 4
COEFICIENTE DE ENGEL VERIFICADO NA BASE DA
DISTRIBUIÇÃO DE DESPESA TOTAL

Regiões Metropolitanas	Coeficientes de Engel	
	ENDEF	POF 1987/88
Belém	0,45	0,45
Fortaleza	0,41	0,43
Recife	0,46	0,39
Salvador	0,45	0,39
Belo Horizonte	0,39	0,36
Rio de Janeiro	0,42	0,38
São Paulo	0,37	0,33
Curitiba	0,44	0,33
Porto Alegre	0,43	0,47

Fontes: ENDEF - Fava (1984); POF - Rocha (1993)

Certamente a resistência que se observa no Brasil em adotar os dados observados de despesa não-alimentar, está associada ao fato de que conduzem a linhas de pobreza muito elevadas, operacionalmente pouco úteis para delimitação da população pobre, monitoramento da evolução da pobreza ou avaliação de impactos de políticas sociais focalizadas nos pobres. Neste sentido, ao estabelecer linhas de pobreza, diferentes autores buscam alternativas permitindo chegar a valores mais baixos que os observados nas pesquisas de orçamento.

As soluções variam das mais simples e diretas às mais engenhosas. A Cepal, desde a década de 70 adota o multiplicador de 2 aplicado ao valor da cesta alimentar para o estabelecimento de linhas de pobreza para o Brasil – o que naturalmente significa um coeficiente de Engel de 0,5 -, tanto para as linhas de indigência estimadas a partir do ENDEF ou da POF1987/1988.[13] Rocha (1993) adota o coeficiente de Engel observado, mas correspondente à classe de despesa alimentar que permite atender apenas às necessidades calóricas mínimas, e não às necessidades calóricas recomendadas, o que resulta

[13] Ver Altimir (1979) e CEPAL (1999).

em um coeficiente de Engel implícito superior ao observado. Finalmente, Ferreira, Lanjouw e Néri (1998) adotam o coeficiente de Engel que se verifica para o intervalo da distribuição onde a despesa total das famílias corresponde ao valor da linha de indigência. Ao proceder assim estão definindo um limite inferior crítico para o valor das despesas não-alimentares (Gráfico 2).

GRÁFICO 2
PROCEDIMENTO DE DERIVAÇÃO DO COEFICIENTE DE ENGEL
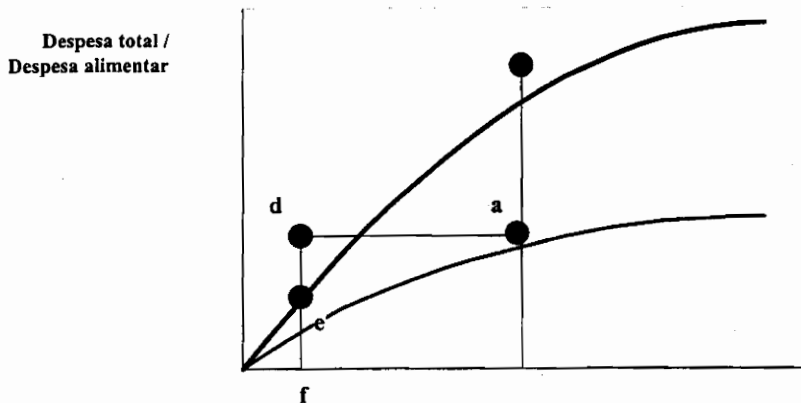
ac - despesa alimentar que permite atender às necessidades calóricas recomendadas;
bc - despesa total correspondente à despesa alimentar ac;
df - despesa total igual à despesa alimentar mínima ac;
ef/df - coeficiente de Engel a ser adotado para obte. a linha de pobreza (LP)
LP = ac *df/ef

Na verdade, tanto a crescente urbanização, como o efeito demonstração do consumo das camadas mais abastadas da população, influenciam a estrutura de consumo dos mais pobres numa sociedade marcada por elevada desiguald de de renda. Isto tem l vado à elevação do valor das outras despesas a níveis incompatíveis com sua utilização no estabelecimento da linha de pobreza. Nestas circunstâncias, as alternativas são as de utilizar a linha de indigência como parâmetro básico, ao invés da linha de pobreza, ou aceitar a adoção de uma componente crescentemente arbitrária no estabelecimento do valor associado ao consumo não-alimentar.

5.   A ESTIMAÇÃO DE LINHAS DE INDIGÊNCIA E DE POBREZA PARA AS REGIÕES NÃO-METROPOLITANAS

Conceitualmente não há razão para que a estimação de LI e LP relativas às áreas rurais e urbanas não-metropolitanas sejam elaboradas segundo uma metodologia diversa daquela adotada nas regiões metropolitanas. Assim, autores que utilizaram o ENDEF como base para derivar as estruturas de consumo utilizaram os mesmos procedimentos para todas as áreas, e elaboraram tantos parâmetros específicos quanto permitia o desenho amostral daquela pesquisa (Thomas, 1983; Fava 1984).

No entanto, procedimentos específicos têm que ser adotados para a geração de LIs e LPs para essas áreas quando se utilizam as POF's como fonte de informação sobre a estrutura de consumo das famílias, já que este levantamento, tanto em 1987/1988, como em 1995/1996, ficou restrito às nove regiões metropolitanas, Goiânia e Brasília.

Na falta de qualquer indicador de preço ou de custo de vida, com abrangência nacional, que pudesse orientar quando aos diferenciais de custo de vida dos pobres entre metrópoles e demais áreas urbanas e rurais do país, Rocha (1993), optou por adotar os diferenciais observados por Fava (1983) com base no ENDEF (Tabela 5).

A utilização desses coeficientes ainda hoje para derivar LIs e LPs relativas às áreas não-metropolitanas de cada região pressupõe que as mudanças em termos da estrutura de consumo e de preços ao consumidor ocorridas entre 1974/75 e 1987/88 em cada região teriam sido neutras quanto ao seu efeito sobre o custo de vida dos pobres nos diferentes estratos de residência. Este é um pressuposto forte, que vai de encontro a algumas evidências derivadas na POF, em particular a da tendência à uniformização das estruturas de consumo das famílias entre regiões e entre classes de despesas.

Se esta redução de diferenciais de consumo vem ocorrendo de forma generalizada, a utilização dos coeficientes de custo derivados do ENDEF para estimar LIs e LPs linhas de indigência e pobreza urbanas e rurais muitos anos depois implica subestimação do valor desses parâmetros.

Acreditando no processo de convergência de valores relativos aos diversos estratos de residência de uma mesma região, Maletta (1998) utilizou como base as LIs e LPs estimadas por Rocha (1993) para as áreas metropolitanas a partir da POF, mas reduziu os diferenciais verificados no ENDEF à metade para estabelecer os valores para áreas urbanas e rurais. Tudo leva a crer que algum procedimento deste tipo será adotado pela Comissão de Pobreza no estabelecimento de novas linhas de pobreza para o Brasil a partir da POF 1995/96.

Organismos internacionais tendem a ver com estranheza os diferenciais de custo de vida entre estratos de residência como os derivados do ENDEF e tendem a utilizar desvios bem mais estreitos quando não dispõem de evidências empíricas específicas a esse respeito. A CEPAL, por exemplo utiliza diferenciais de 5% para áreas urbanas e 25% para as rurais em relação aos valores metropolitanos (CEPAL, 1996).

A ausência de informações de despesas e de preços para unidades espaciais outras que as regiões metropolitanas, Goiânia e Brasília é, sem dúvida, a lacuna estatística mais grave para que se construa LIs e LPs adequadas para o Brasil. Isto significa que os 2/3 da população brasileira residentes em áreas rurais e urbanas não-metropolitanas são levados em conta de forma precária nos estudos sobre pobreza. Neste sentido, é urgente a melhoria da abrangência de pesquisas nacionais de orçamentos familiares, que permitiria, dentre outros, captar as especificidades intrarregionais de custo de vida para os pobres que resultam da homogeneização crescente de estruturas de consumo e de preços ao consumidor .

TABELA 5
DIFERENCIAIS DE VALORES ENTRE LINHAS DE POBREZA E INDIGÊNCIA
URBANAS E RURAIS E A DA METRÓPOLE DE INFLUÊNCIA *

	LP	LI
Norte		
Urbano	0,8917	0,9843
Nordeste		
Urbano	0,7056	0,7542
Rural	0,4259	0,6552
Minas Gerais/Espírito Santo		
Urbano	0,6723	0,8620
Rural	0,3980	0,6915
Rio de Janeiro		
Urbano	0,6222	0,7259
Rural	0,4542	0,5733
São Paulo		
Urbano	0,6390	0,8161
Rural	0,4020	0,6418
Sul		
Urbano	0,7510	0,9049
Rural	0,5063	0,7137
Centro-Oeste		
Urbano (a)	0,7614	0,8702
Rural (b)	0,4373	0,6551

Fonte: Fava (1984).
(*) Em relação ao valor associado à metrópole ou à média das metrópoles da região (metrópole(s) igual a 1)
(a) Os valores relativos referem-se ao do Distrito Federal.
(b) Estrato rural da região não investigado pelo ENDEF. O coeficiente foi calculado a partir da média dos coeficientes das demais áreas rurais.

6. ATUALIZAÇÃO DOS VALORES DE LINHAS DE INDIGÊNCIA E DE POBREZA

Devido a seu custo e complexidade, as pesquisas de orçamentos familiares se realizam em intervalos plurianuais – idealmente a cada cinco anos.[14] Em conseqüência, é necessário proceder à atualização dos valores expressos originalmente a preços da data de referência da pesquisa de orçamentos, de modo a obter indicadores de indigência e de pobreza com base nas pesquisas domiciliares que se realizam anualmente, ou nas censitárias, que se realizam em anos diferentes dos da POF.

No que concerne à LI, a atualização consiste em manter inalterada a composição da cesta alimentar, isto é, as quantidades por alimento como estabelecido inicialmente, introduzindo novos preços. Mesmo quando se dispõe de um sistema de preços ao consumidor que permite acompanhar uma ampla gama de produtos, como o sistema brasileiro, a atualização acaba sendo complexa devido, por exemplo, a mudanças na forma de comercialização dos produtos. Uma solução simplificadora é proceder à atualização de preços dos produtos alimentares mais importantes, e utilizar o índice de preço assim derivado para corrigir o valor correspondente aos demais produtos da cesta alimentar (Tabela 6). Ordenando os produtos em função decrescente do seu aporte calórico, cerca de 25 produtos correspondem a cerca de 75% da despesa alimentar e 35 a cerca de 90% (Rocha, 1993). Ao corrigir

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[14] No Brasil, como se viu, elas vêm sendo realizadas aproximadamente a cada dez anos.

agregadamente o valor dos demais produtos, evita-se muitas vezes dificuldades associadas a mudanças na forma de comercialização de produtos.[15]

TABELA 6
PROCEDIMENTOS ALTERNATIVOS DE VALORAÇÃO DAS LINHAS DE INDIGÊNCIA
PARA A REGIÃO METROPOLITANA DE SÃO PAULO EM SETEMBRO DE 1990

	Cr$ (Set./1990)*
via preços dos produtos	2.523,42
via índice de preços (INPC-alimentação, São Paulo)	2.888,54

* Valor do Salário Mínimo em setembro de 1990: Cr$ 6056,31

Naturalmente o procedimento mais simples no caso brasileiro consiste em adotar a variação do índice de preços de alimentação restrito do IBGE, calculado para cada região, de forma a atualizar o valor da linha indigência daquela mesma região. Referindo-se ao consumo das famílias com despesa mensal familiar de até oito salários mínimos, é uma *proxy* aceitável da evolução do custo da alimentação dos pobres.

A solução ideal consiste em construir, no âmbito do sistema de índices de preços do IBGE, um índice associado à cesta alimentar adotada para fins do estabelecimento da linha de indigência. Deste modo, a divulgação mensal dos resultados da pesquisa de preços passaria a incluir a variação do valor da linha de indigência em cada uma das áreas da pesquisa.

No que concerne à atualização da despesa não-alimentar, o procedimento mais largamente utilizado na prática internacional para estabelecimento da LP consiste em utilizar o coeficiente de Engel (ou outro parâmetro desempenhando o mesmo papel) em conjunção com o valor atualizado da LI. O pressuposto é que o custo alimentar e não-alimentar dos pobres estariam evoluindo à mesma taxa.

Não existe, no entanto, base teórica que permita supor que o coeficiente de Engel seja uma constante no médio prazo, como adotado como premissa na maioria dos estudos sobre pobreza. Ao contrário, no Brasil, por exemplo, as evidências são de que as despesas alimentares representam uma forte tendência declinante na despesa global, apesar de que o consumo alimentar venha evoluindo no sentido de substituir alimentos básicos e de menor custo, por alimentos não-tradicionais e de preço mais elevado.[16]

No Brasil, não existem restrições do ponto de vista da disponibilidade de dados estatísticos que justifique o uso do coeficiente de Engel na atualização dos valores das linhas de pobreza. Dado que as POFs permitem dispor de informações detalhadas por tipo de despesa, um procedimento mais adequado consiste em acompanhar a evolução dos preços não-alimentares por categoria do INPC (habitação, vestuário, etc.), que corresponde aos agrupamentos das despesas na POF no ano base (Rocha, 1997) .

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[15] Mudanças de qualidade, de especificação secundária do produto e de embalagem, por exemplo.

[16] Para uma comparação da estrutura de consumo no ENDEF e na POF ver Rocha (1995)

7. CONCLUSÃO

Do que foi discutido nas seções anteriores decorre uma conclusão básica: a escolha da metodologia mais adequada para a construção de linhas de pobreza e de indigência é determinada, essencialmente, pela disponibilidade de dados estatísticos. As etapas analisadas se referem ao procedimento consagrado na literatura quando se dispõe de informações sobre a estrutura das despesas das famílias, o que resulta em dar primazia ao consumo observado como base para o estabelecimento dos parâmetros. Pode-se concluir ainda que:

1. Dadas as reconhecidas diferenças espaciais que se verificam no Brasil, o estabelecimento dos parâmetros – LIs e LPs - deve privilegiar o maior nível de detalhamento possível a partir das estatísticas disponíveis. Isto implica reconhecer que resultados nacionais são a consolidação de resultados regionais de precisão distinta. Assim, os parâmetros obtidos para as regiões metropolitanas, Goiânia e Brasília, para as quais se dispõem de resultados recentes das pesquisas de orçamento familiares, são qualitativamente diversos daqueles relativos às demais áreas urbanas e rurais do país, para as quais o estabelecimento de LI's e LP's repousa em hipóteses sobre a evolução provável do custo de vida dos pobres nessas áreas a partir dos meados dos anos 70. Deste modo, a falta de dados de orçamentos familiares atualizados e de abrangência nacional é a principal lacuna estatística para a construção de linhas de indigência e pobreza, e naturalmente, para a obtenção de indicadores seguros a partir da sua utilização.

2. No que concerne à construção das LI's, existem parâmetros nutricionais que orientam na determinação da cesta alimentar adequada a partir do consumo observado. No entanto, cabe destacar que, a partir de uma mesma população, é possível arbitrar necessidades nutricionais médias bastante distintas – o exemplo do texto mostra desvio de até 9% entre diferentes estimativas -, que naturalmente resultam em diferenciais do valor da linha de indigência.

3. A adoção da cesta alimentar observada que permite atender às necessidades calóricas recomendadas, ou a introdução de alguma normatização no estabelecimento da cesta alimentar pode resultar em desvios que atingem 50% do valor da linha de indigência resultante (exemplo de São Paulo na Tabela 3).

4. A ausência de parâmetros que orientem o que seja o nível mínimo aceitável de consumo não-alimentar faz com que o valor dessas despesas seja definida frequentemente de forma arbitrária. O bjetivo é obter uma linha de pobreza que se situe dentro de um intervalo de valor considerado adequado pelo analista tendo em vista sua utilização empírica. Diferenciais de valor do coeficiente de Engel adotado para a metrópole de São Paulo podem atingir 50%.

A Tabela 7 tem como objetivo ilustrar até que ponto opções metodológicas diversas tem o potencial de afetar os valores das LIs e das LPs, o que determina os resultados que se venham obter sobre incidência e sobre o perfil da indigência e da pobreza no Brasil. Os dados se referem à metrópole de São Paulo, de modo que não sofreram as inevitáveis restrições quanto à disponibilidade de informações que têm que ser enfrentadas para a estimação de parâmetros relativos às áreas urbanas e rurais não-metropolitanas. Para estilizar a questão da qual se tratou neste texto, derivaram-se valores para a LI e a LP escolhendo, a cada passo, as opções metodológicas extremas dentre as apresentadas, isto é, aquelas que contribuem para obter os valores mais altos e mais baixos para a LI e a LP. Os efeitos acumulados de opções extremas quanto à necessidade calórica média e à forma de estabelecer a cesta alimentar, que permitem atender à essas necessidades recomendadas, resultam em LIs cujo valor superior é 51% mais elevado que o mais baixo. Ao incorporar diferenças quanto à relação entre despesas alimentares e não-alimentares no ano-base, a LP mais elevada chega a ter valor 128% superior ao da alternativa mais baixa. Este diferencial de valor para a linha de pobreza implicaria em obter, com base na PNAD de 1987, proporção de pobres para a metrópole de São Paulo de, respectivamente, 11% e 42% (ver o conjunto de

indicadores relevantes no Anexo 2). Vale ressaltar que estes diferenciais são atingidos sem levar em conta as opções metodológicas para a atualização dos valores das dos parâmetros, estimados, inicialmente, a preços do ano-base da pesquisa de orçamento.

TABELA 7
SIMULAÇÃO DAS OPÇÕES EXTREMAS PARA O ESTABELECIMENTO DE LI E LP
Metrópole de São Paulo - 1987

Opções Extremas	Necessidades Calóricas	Forma de estabelecimento da cesta alimentar	Valor da LI (Cz$ out/87)	Forma de determinação da despesa não alimentar	Valor da LP (Cz$ out/87)
que maximizam os valores	2135 →	ajuste de 90% para 100% do aporte calórico	793,85 →	Engel de 0,50 (arbitrário) →	1587,70
	desvio 8,3%		desvio 49,8%		desvio 126,9%
que maximizam os valores	2313	cesta observada	1188,98	Engel de 0,33 (observado) →	3602,97

Fonte: POF 19871988
Nota: Salário Mínimo equivalia a Cz$ 2.640,00

É evidente que, na prática, dificilmente serão feitas opções metodológicas que impliquem, de forma consistente, a obtenção de valores máximos e mínimos para os parâmetros como esquematizado no exemplo. No entanto, é relevante destacar que, em função das muitas possibilidades de escolha metodológica a cada etapa, os parâmetros estimados refletem o consumo observado e o julgamento de valor do analista em proporções variáveis. Como conseqüência, tanto os parâmetros como os resultados obtidos de sua aplicação são únicos, prestando-se para análise em *cross section* e de evolução temporal da incidência e caracterização da pobreza, tendo como referência as premissas utilizadas no estabelecimento dos parâmetros.

Neste sentido, resultados obtidos a partir do conjunto de parâmetros diversos obviamente não são comparáveis. Resultados "mais adequados" para descrever as condições de indigência e de pobreza no Brasil são aqueles que derivam dos parâmetros obtidos de forma mais "sensata", tendo em vista tanto os dados disponíveis, como as hipóteses adotadas para contornar as lacunas de informação. Comparações internacionais são necessariamente precárias, já que afetadas não só por opções metodológicas diversas na construção das linhas de indigência e de pobreza em cada país, como por diferenças nacionais quanto a detalhamento e especificação das bases de dados estatísticos.

ANEXO 1

COMPARAÇÃO DAS QUANTIDADES DOS 16 PRINCIPAIS PRODUTOS DE CESTAS ALIMENTARES DEFINIDAS A PARTIR DE CRITÉRIOS DIVERSOS

São Paulo

Gêneros Alimentícios	Quantidades (gramas por pessoa/dia)			
	Requerimento Mínimo (1786 kcal/dia)	Requerimento Recomendado (2135 kcal/dia)		
		Mínimo Ajustado	Ajustado 90% cal. (1)	Observado (2)
Arroz	119	143	159	131
Açúcar refinado	66	79	88	65
Óleo de soja	27	32	35	33
Pão	56	67	74	76
Feijão	40	48	53	38
Leite de vaca	141	168	186	205
Macarrão	11	13	14	13
Carne bovina de segunda	21	25	28	25
Farinha de trigo	11	13	14	14
Galinha ou frango	31	37	41	45
Carne suína	10	12	13	19
Margarina vegetal	4	5	6	5
Farinha de mandioca	7	8	9	9
Ovo	18	21	23	19
Biscoito	6	7	8	-
Carne bovina de primeira	9	11	-	20

Fontes: IBGE/POF - dados básicos. Requerimentos calóricos estimados por Ria Ellwanger (IBGE/DPE).
(1) Ajustamento das quantidades apenas dos 15 produtos responsáveis por 90% do aporte calórico da cesta completa.
(2) Cesta observada no terceiro décimo da distribuição de despesa.

ANEXO 2

SIMULAÇÃO DE INDICADORES DE POBREZA COM BASE EM VALORES EXTREMOS DA LINHA DE POBREZA

Metrópole de São Paulo – 1987

Valor da LP (Cz$)*	Proporção	No. de Pobres	Gap Ratio	Gap Index	Gap Quadrático	Pobres+ Não-Pobres
1.424,97	0,1112	1.594.691	0,3963	0,0441	0,0275	14.344.138
3.330,84	0,4218	6.050.352	0,4115	0,1736	0,0978	14.344.138

* Valores a preços de setembro de 1987, mês de referência da PNAD.
** Indice proposto por Foster, Greere Thorbecke.

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Regionalised Poverty Lines: general comments and applications for Brazil[*]

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CONTENTS

I. INTRODUCTION

The definition of poverty lines is quite a controversial issue in literature. The main reason for controversies arises from the need to include subjective matters in the construction of these lines, starting with the definition of poverty.

One of the particularly relevant controversial issues for Brazil is regionalising the poverty lines. The more heterogeneous the population and economy (productive aspects) of a society the more pressing the call to define poverty lines differentiated by region. This procedure, however, magnifies the arbitrary aspects involved in constructing poverty lines since the quantification of how much the lines must be differentiated is also based on subjective issues.

The purpose of this article is to discuss the need to establish regionalised poverty lines. Motives and reservations will be discussed for regionalising the line, considering all components in the construction of a poverty line. This discussion is in the second section herein. Then we will discuss a case study for Brazil.

This part will provide an illustration of the magnitude of the estimated differences in papers often quoted as a reference and which adopt different methodologies (third section) as well as an association (fourth section) of these differences to the regionalisation of some of the components of the poverty line, such as the contents of the food baskets, price of these foodstuffs and the coefficient of Orshansky. The last section will give our recommendations regarding the use of regionalised lines.

II. MOTIVES FOR REGIONALISATION

In this article we will be adopting a certain poverty line construction method. This method requires four kinds of data for a poverty line. The first is a minimum nutritional requirement, the second a food basket that meets this requirement, which together with the prices of this food (third information) comprises food expenditure. Lastly, a spending level with other products (non-food) defines a poverty line.

This poverty line construction method implicitly assumes a definition of poverty. Poverty would be associated to a level of welfare below a certain basic level ($\bar{u}$). This basic level can be achieved by combining a number of alternative baskets of food and non-food products. These combinations, however, are subject to a restraint. The food part of the basket must meet a minimum calorie requirement.

In this section we will discuss the arguments that would justify the regionalisation of each aforementioned component as necessary for constructing a poverty line.

II.1. Nutritional requirements

Nutritional requirements are based on a quantity of energy that an individual requires to stay healthy. This quantity depends, of course, on characteristics of the individuals, such as age, height, weight. The variability of these individual characteristics could create nutritional requirements for each individual. However, it is more convenient to create average requirements associated with the regions, based on the composition of the local population. Moreover, the requirement also depends on other factor that vary according to the region under study, such as the climate, for instance.

The relationship, however, between the aforementioned factors and calorie requirement is hard to quantify. Consequently, any estimate of how differentiated the requirements must be is questionable. This fact leads to the controversy of the question of the use of poverty lines based on differentiated requirements.

II.2. Food prices

To the extent that food prices differ and this is not taken into consideration, we may be considering a poor person when he/she consumes the same food basket and meets a level of utility equal to that of a non-poor person as shown in figures 1a-b.

Figure 1a shows an individual from a certain region consuming a basket α accessible to a budget represented by line BB. Considering a poverty line corresponding to the budget represented by AA, this individual would not be classified as poor. Consider another region where all products are cheaper.

Figure 1b represents an individual in this other region consuming the same aforementioned basket α. In this case the individual would be considered poor, since what he/she spends on the basket (BB) is lower than the poverty line (AA), although it meets the same calorie requirement and attains the same level of utility as that of the individual in figure 1a (we are assuming that the preferences are identical). If we were to adjust the prices we would have a poverty line equal to that in figure 1a (CC) and, therefore, we would not consider the individual as poor.

II.3. Food basket

Supposing that the poverty line must meet the calorie requirements and a certain level of welfare, then we must consider if the food baskets acting as a basis to define a poverty line must vary. If the individuals differ in relation to preferences, a certain combination of calorie requirement and utility level can be associated to differentiated baskets that, in their turn, would be associated to differentiated budgets.

Figures 2a and 2b show two individuals who, as they have different preferences, must consume different baskets to meet the same calorie level (line KK) and attain the utility level $\bar{u}$. Note that the budget associated to the individual in figure 2b is much higher, which suggests that the poverty line must also be higher.

However, we do not know if, considering the different baskets, we will be ensuring that the individuals attain the same utility. Figure 3 illustrates a situation where, when considering a differentiated basket, we are permitting that the individual attains a utility level $\bar{u}'$ higher than level $\bar{u}$.

II.4. Orshansky's Coefficient

The motives and reservations for basing a regionalised line on a regionalised Orshansky's coefficient are the same as those presented for the basket and food price. In the case of the Orshansky coefficient, we would be discussing the regionalisation of the expenditure with non-food products, that is, the other products required for the individual to reach the stipulated welfare level.

It is, therefore, as if we were to add the arguments described for the food basket to those for the food prices, which would suggest a position in favour of regionalising this poverty line component. On the other hand, the reservations are also the same, which makes this regionalisation so controversial with regard to the other two components mentioned.

III. MAGNITUDE OF THE DIFFERENCES IN THE REGIONALISED POVERTY LINES FOR BRAZIL

In this section we will provide estimates of regionalised poverty lines for Brazil reported in papers that use the same method to construct a line and regionalised information for each component mentioned[1]. Most of the papers, however, report indigence line figures. These figures do not, therefore, incorporate one of the components of the poverty line, that is, Orshansky's coefficient.

The papers provide a number of information sources in relation to the calorie requirement, food basket, food price and, when applicable, Orshansky's coefficient. Different degrees of dispersion of the figures reported for each region are associated to this variety.

Barros (1998) provides regionalised estimates for the indigence line based on data from ENDEF, together with calorie requirements from CEPAL (1996). This paper also provides a comparison of these figures with those obtained by Fava (1984), which, in turn, also combines data from ENDEF with requirements from Martins & Hidalgo (1983). Table 3.1 reports the estimated indigence lines in Barros (1998) and reveals a considerable disparity in figures between the regions under study. For the rural areas in the Northeast and East, the figures are around one third of that estimated for the metropolitan region of São Paulo.

The regional variations mentioned for the indigence line are higher than that obtained by Fava (1984). In fact, the variation coefficient (ratio between the highest and lowest figure) of the indigence lines estimated by Fava is 0.21 (2.0) and, therefore, much lower than that obtained by Barros (1998), which is 0.25 (2.7).

Barros & Henriques (1999) estimate indigence and poverty lines based on PPV and also report a comparison of their results, this time with Rocha (1995 and 1997). This time the comparison does not discuss estimates based on the same source of data since the latter uses POF and ENDEF data.

The estimated indigence line figures in these papers are given in Table 3.2. The indigence lines referring to Barros & Henriques (1999) show a considerable spatial variability, with the lines varying between R$ 1,12 a day per person in the rural area of the Southeast and R$ 1,98 a day per person in the metropolitan area of Rio de Janeiro. These figures imply that the variation coefficient (ratio between the highest and lowest figure) of the estimated indigence lines is 0.16 (1.8)[2].

Note that the lines proposed by Sônia Rocha reveal, as does the PPV, a degree of accentuated spatial variability, in fact, greater than that obtained from the estimates based on PPV. According to Rocha (1995) the indigence lines vary between R$ 0,55 for the Northeast rural area and R$ 1,05 for the metropolitan area of São Paulo, representing a variation of 0.25 (1.9) in terms of a variation coefficient (ratio between the highest and lowest figure)[3]. In relation to the indigence line proposed in Rocha (1997) the figures vary between R$0,72 in the Northeast rural area and R$1,46 in the metropolitan region of São Paulo, representing a variation of 0.25 (2.0) in terms of a variation coefficient (ratio between the highest and lowest figure).

The figures estimated for the regionalised poverty lines are provided in Table 3.3. These figures are associated to the writings of Barros & Henriques (1999) and Rocha (1995). With regard to spatial disparities, it is found that the estimated lines based on the former paper provide similar figures to those found in the estimates of Rocha (1995). The variation coefficient in both papers is around 0.40 while the

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[1]   Ferreira, Lanjow & Neri (1999) estimate regionalised lines for Brazil according to the method described in this paper. However, the authors do not consider regionalisation of the baskets and, therefore, their results will not be analysed herein.

[2]   It is worth mentioning that the group of regions considered in Barros (1998) is larger than that considered in Barros & Henriques (1999). Consequently, the dispersion of the figures reported in the first paper tends to be greater than that reported in the second.

[3]   In these comparisons we are only considering regions where we can also estimate figures based on PPV.

ratio between the highest and lowest figure is slightly higher, 4.6, in Barros & Henriques (1999) than in Rocha (1995), 4.0[4].

IV.   FACTORS EXPLAINING THE REGIONAL DIFFERENCES

The differences between the regional poverty lines can be attributed to four basic factors. The first relates to the spatial differences existing in the nutritional requirements that act as a basis for defining each region's food baskets. The second has to do with the fact that the food baskets are differentiated between the regions. The third factor is the regional differences in the prices of the food in each region's food basket. Lastly, the fourth factor is associated to the Orshansky coefficient, which can differ from region to region.

In this section, we endeavour to assess the contribution of three of these four factors to explain the differentiation between the regional poverty lines. First, we analyse to what extent the differences in the baskets and food prices explain the regional differences noted between the indigence lines. Then we analyse to what extent the differences in the Orshansky coefficient influence the dispersion of the regionalised food basket figures. This implies that the regional differences in nutritional requirements are not assessed.

Table 4.1 gives ENDEF-based estimates (i) of the cost of the regional food basket assessed at prices in the respective region; (ii) of the cost of the regional food basket assessed at São Paulo prices; and (iii) of the cost of the São Paulo food basket assessed at prices from the different regions. These estimates are also taken from Barros (1998) and were standardised for the metropolitan area of São Paulo (=100).

Table 4.1 shows that both the differences in composition of the food basket and those relating to dispersion of regional prices are relevant in explaining the differentiation between the indigence lines. Nevertheless, it seems that there is evidence that the contribution of the differences in composition of the baskets is relatively more important.

In fact, while the variation coefficient of the calculated indigence lines when we permit that only the prices vary is 0.11, this same indicator reaches the 0.17 mark in the case where we keep the prices fixed and vary the composition of the food basket. This finding is confirmed when we use the ratio between the highest and lowest figure for the indigence lines: 1.5 against 1.7, respectively. It is worth mentioning that the variation coefficient (ratio between the highest and lowest figure) becomes much higher, 0.26 (2.7), when we permit that both the prices and food composition vary regionally.

This same methodology was used to assess the contribution of these two factors to explain the regional differentiation of the calculated indigence lines based on the PPV. The estimates are shown in Table 4.2, with standardised basket and prices. These figures correspond to those reported by Barros & Henriques (1999) referring to the group of regions of PPV. The results obtained confirm the finding that the spatial differences in the composition of the baskets are relatively more important than the regional differences in the food prices. In fact, the variation coefficient drops from 0.17 to 0.13 when we permit that only the baskets vary, and to 0.10 when the prices are the varying component. The indicator of the ratio between the highest and lowest figure of the indigence lines shows the same conclusion: it has a drop of 0.25 points in the first case and 0.38 in the second.

In short, the evidence given indicates that the effects associated to the spatial differences both in the baskets and prices are relevant to explain the regional disparities existing between the indigence lines.

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[4]   Barros & Henriques (1999) point out the greater dispersion of poverty line figures in relation to the indigence line figures, which, according to the authors, suggests a relationship between the indigence line figures and Orshansky's coefficient of the regions under study.

Moreover, we were able to see that, when we isolated the effects of these two factors, the differences in the structure of the baskets were relatively more important than the regional differences in the food prices.

In relation to the Orshansky coefficient, Barros & Henriques (1999) report results of two alternative forms. The first, reported in Table 3.3, uses this regionalised coefficient. Alternatively, the authors report figures for regionalised baskets but standardised with regard to the Orshansky coefficient[5].

With regard to the spatial variations, we find that, when we consider the Orshansky coefficient variable to the intensity of these express spatial differences in poverty lines, it increases significantly compared to those expressed with the standardised coefficient. In fact, the variation coefficient (ratio between the highest and lowest figure) increases from 0.16 (1.8), when the coefficient is standardised, to 0.36 (4.6), when we consider regionalised figures for the coefficient.

This variation is much greater than those considered when the basket or food price is standardised. Therefore, of the items considered in this section we can say that regionalisation of this coefficient is the most responsible factor for the dispersion of the poverty line figures. It is worth mentioning, however, that the Orshansky coefficient is related to the spending on non-food products. Its regionalisation, therefore, is equal to the regionalisation both of prices and the basket of these products.

V.   CONCLUSION

There are several theoretical arguments on which the construction of poverty lines differentiated between regions is based. In fact, these arguments sustain the regionalisation of each component considered in the construction of the poverty line (calorie requirement, food price, food basket and Orshansky coefficient). Nevertheless, the empirical procedure to regionalise the food basket and Orshansky coefficient are questionable since they assume that individuals who meet the requirements considered for each region attain the same utility level, and that this is not what can be seen.

When the baskets are filled with their regionalised components, the dispersion of the figures is reasonably sensitive to the sources of information and/or procedures used to define the components. Comparisons of indigence lines by Barros (1998) and Fava (1984) or Barros & Henriques (1999) and Rocha (1995 and 1997) show dispersion measurements varying according to the papers.

Finally, we show that the most responsible factor for dispersing the regionalised poverty line figures is the Orshansky coefficient. Barros & Henriques show that the variation coefficient of the regional baskets varies from 0.16 to 0.36 when using this standardised or regionalised coefficient, respectively.

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[5] The authors used the figure 2.5 in this standardisation.

Figure 1.A
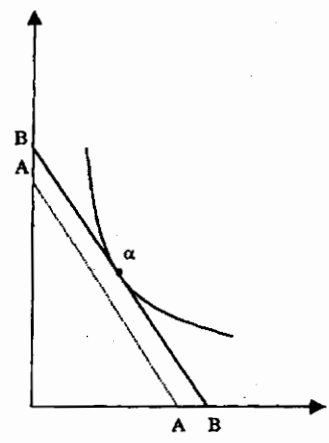
Figure 1.b
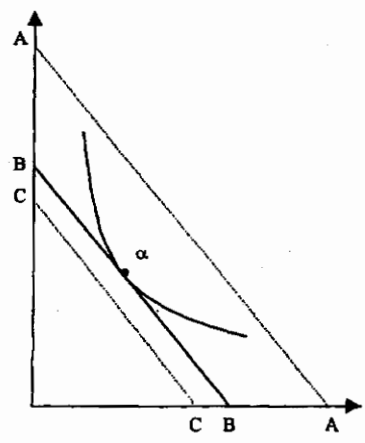
Figure 2.A
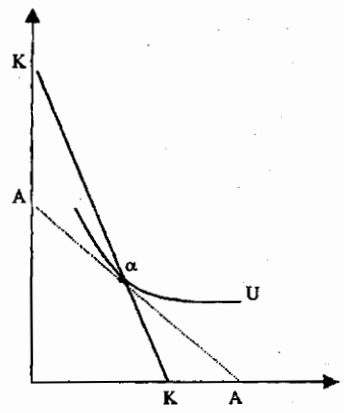
Figure 2.3
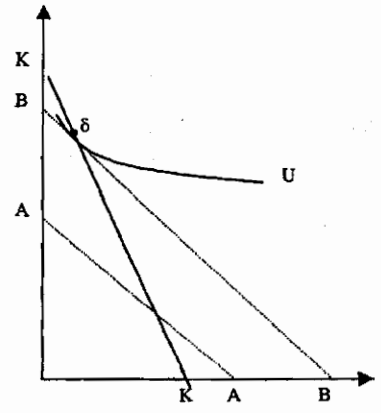
Diferencias Regionales en los Patrones de Consumo en el Perú

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INEI - PERÚ

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ÍNDICE

INTRODUCCIÓN

El Perú es un país donde se encuentran grupos poblacionales con diferencias socioeconómicas bien marcadas. Un criterio de estratificación ampliamente aceptado en el país, y corroborado por múltiples indicadores, es el que toma como cortes a las regiones naturales: la costa, que comprende desde el nivel del mar hasta los 2000 m.s.n.m; la sierra, por encima de los 2000 metros y los valles interandinos, y la selva, que comprende desde el llano amazónico hasta los 2000 m.s.n.m. en la falda oriental de la Cordillera de los Andes. La costa es la región de mayor desarrollo relativo y en el otro extremo se ubica la sierra.

Esta estratificación es la que ha sido adoptada por el Instituto Nacional de Estadística e Informática desde 1995 para construir las canastas de consumo que sirven de base para la medición de la pobreza y las condiciones de vida, y sobre cuyas diferencias se comenta en este artículo.

El INEI tiene una vasta experiencia en el desarrollo de encuestas de hogares desde los años 60, la misma que se ha acrecentado a lo largo de la década de los noventa. Específicamente desde 1995 se ha establecido un Programa Permanente de Encuestas de Hogares de periodicidad trimestral, que cubre diversos temas en cada ocasión y a partir de los cuales se producen las estimaciones y estudios de condiciones de vida y de pobreza. Desde 1997, el INEI ha recibido el apoyo del Programa de Mejoramiento de Encuestas y la Medición de Condiciones de Vida, patrocinado por el Banco Interamericano de Desarrollo (BID), el Banco Mundial (BM) y la Comisión Económica para América Latina y el Caribe, que ha permitido refinar fundamentalmente la medición del gasto de los hogares.

Sobre la base de estas encuestas se ha efectuado una evaluación de las características de las canastas de consumo de los hogares, y se han definido poblaciones de referencia diferentes para cada una de las regiones, considerando las realidades propias de cada lugar.

En este documento se presenta información que permite establecer las diferencias socioeconómicas en las regiones naturales del perú, y su relación con las diferencias en el consumo calórico y en el consumo físico en tales regiones.

EL PROGRAMA DE ENCUESTA DEL INEI Y EL PROGRAMA MECOVI

El INEI estableció en 1995, un programa trimestral de encuestas de hogares, a nivel nacional para medir los cambios en las condiciones de vida de la población peruana. En sus dos primeros años de aplicación, estas encuestas reposaron exclusivamente en los recursos provenientes del Gobierno Central y a partir de 1997 se contó con el apoyo Programa de Mejoramiento de Encuestas y Condiciones de Vida del Perú (MECOVI), patrocinado por el Banco Interamericano de Desarrollo (BID), Banco Mundial (BM), y la Comisión Económica para América Latina y el Caribe (CEPAL).

Este Programa permitió al INEI contar con asistencia técnica para mejorar los cuestionarios, procedimientos, programas y sistemas de control de calidad, lo que ha permitido ofrecer información más refinada a la comunidad. Este mejoramiento ha sido logrado con el concurso de consultores externos nacionales e Internacionales, así como del personal de la propia institución.

El programa de encuestas trimestrales comprende el seguimiento de un panel de cerca de 5 mil hogares que son entrevistados con espaciamiento de 12 meses, lo que permite realizar estimaciones de estado, así como de la dinámica del proceso social.

Existe un módulo permanente de empleo e ingreso y módulos rotativos en cada trimestre. En el segundo trimestre se hace seguimiento del acceso a los programas sociales, específicamente en salud, alimentación, educación y programas orientados a las viviendas. El tercer trimestre es una encuesta especializada de empleo e ingreso, que se realiza en convenio entre el Ministerio de Trabajo y Promoción

Social. En el cuarto trimestre se pone énfasis en la medición del gasto, conjuntamente con empleo, ingreso, educación, salud y programas sociales, con los cuales se producen las estimaciones oficiales sobre condiciones de vida y pobreza en el Perú.

El programa de encuestas puesto en práctica en el marco del Programa MECOVI desde el tercer trimestre de 1997 permite la comparabilidad de todos los indicadores sociales y económicos de los hogares con relación a los obtenidos con anterioridad, salvo en lo referente al gasto. El cuestionario empleado en las ENAHO de 1997 para medir el gasto es el que sufrió las mayores transformaciones, habiendo pasado de una indagación al jefe del hogar por los gastos en grupos de consumo total, a un detalle más prolijo con información proporcionada por cada miembro del hogar sobre los gastos efectuados fuera del hogar. Este cuestionario se aproxima mejor al empleado en las clásicas encuestas de presupuestos familiares.

Se considera que el cuestionario empleado actualmente mide mejor el nivel de consumo de los hogares, el mismo que está muy por encima del obtenido en 1995 y 1996, por lo que la proporción de hogares y población con gastos por debajo de las líneas de pobreza son menores que antes, por lo cual los resultados del nivel de la pobreza que se obtienen de 1997 en adelante empleando el método de la línea de pobreza con el gasto no son comparables con los anteriores.

CARACTERÍSTICAS DE LA ENCUESTA NACIONAL DE HOGARES

Para este documento se ha hecho uso fundamentalmente de la encuesta del cuarto trimestre de 1997, que es la que ha servido de base para la construcción de las poblaciones de referencia y las canastas de consumo para la determinación de las líneas de pobreza, con las cuales se han producido las estimaciones de pobreza. En 1998 se mantuvo la misma canasta de 1997

La encuesta del cuarto trimestre tiene el objetivo de determinar los niveles de pobreza de la población, generar indicadores sociales, y de movilidad social así como asegurar la comparabilidad de los indicadores a través del tiempo.

La muestra constó de 6,800 hogares, seleccionados aleatoriamente en tres etapas, y permite hacer inferencias a nivel nacional, áreas urbanas y rural, regiones naturales (Costa, Sierra y Selva) y Lima Metropolitana.

Se emplearon 4 tipos de cuestionarios:

- El primero, para ser respondido por el jefe del hogar, para obtener las características de las viviendas, la composición de los hogares, su equipamiento, los gastos dentro del hogar y el reconocimiento de los programas sociales. También es respondido por cada miembro del hogar sobre los aspectos de educación, salud, empleo, ingreso y gastos fuera del hogar.

- El segundo cuestionario es para obtener información que permita determinar los ingresos de los productores agropecuarios.

- El tercero es para captar información del equipamiento, facilidades e inversiones en las localidades rurales y es respondido por líderes de las comunidades.

- El cuarto cuestionario es para registrar los precios al consumidor en los conglomerados del área rural seleccionados para la muestra.

El procesamiento es descentralizado en 25 sedes departamentales del INEI hasta una consistencia primaria. Se cuenta con una red de apoyo a través de Internet para estandarizar soluciones a problemas que se presentan en la operación de campo y en el procesamiento. Se dispone también de un sistema

automatizado de gestión para hacer el monitoreo del avance y de la calidad de los procesos en la operación de campo. La depuración fina de los datos se realiza en la sede central del INEI en Lima.

CONDICIONES SOCIOECONÓMICAS DE LAS REGIONES DEL PERÚ

A continuación se presentan algunos indicadores socioeconómicos de los hogares y personas que permiten mostrar las diferencias que existen en la composición demográfica, familiar, en capital humano y en acceso a servicios.

ASPECTOS DEMOGRÁFICOS

La población peruana se encuentra asentada fundamentalmente en la capital de la república, Lima, donde reside el 28,1% de la población total del país. En la Costa[2] lo hará el 22,9 %. El área andina alberga al 36,3% y la Selva a 12,7%.

E tamaño de los hogares es mas o menos homogéneo en la costa y en la sierra 4,6 y 4,7 personas por hogar respectivamente, y algo mayor en la selva con 5,0.

La composición de edades de la población es bastante diferente. La edad promedio en la capital es de 28,5 años, 24,8 en la sierra y 22,6 en la selva. La edad mediana del país es de 21 años, en tanto que en la selva es solo 17, que es marcadamente diferente de la de Lima que es 25. Se encuentra así que en la Costa, el 32,8% de los habitantes tiene menos de 15 años de edad, mientras que el otro extremo se da en la Selva con el 43,5% de su población en ese rango de edades.

Estos datos reflejan una alta predominancia de niños y adolescentes en la selva, mientras que en Lima la proporción de adulto es mucho mayor. Estas características demográficas tienen gran influencia en las diferencias en los patrones de consumo de la población.

DIFERENCIAS SOCIO - ECONOMICAS POR AREA

Aspectos Demográficos	Costa	Sierra	Selva	Lima	Total
Población (%)	22.9	36.3	12.7	28.1	100.0
Personas por hogar	4.6	4.7	5.0	4.6	4.7
Edad media	27.1	24.8	22.6	28.5	26.1
Población <= 15 años	32.8	40.3	43.5	27.9	35.5

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[2]   En lo que sigue de este documento, Costa se refiere a la franja litoral del país, excluida Lima, con el fin de mostrar mejor las diferencias socio-económicas.

ASPECTOS SOCIALES

Existen marcadas diferencias en aspectos sociales. El analfabetismo adulto en la sierra afecta al 22,1% en tanto que en Lima es sólo 3,6%. El promedio de años de estudio es 3,5 años mayor en Lima que en la sierra. Asimismo la proporción de personas mayores de 15 años con estudios post primarios es de 80,1% en lima contra 46,9% en la selva.

Las diferencias en asistencia escolar entre los 6 a 16 años, son menos marcadas que en los indicadores citados anteriormente, pues la brecha entre Lima (95,8%) y la Selva (86,4%) es de 9,4 puntos porcentuales.

Por otro lado, el acceso a los servicios de salud frente a emergencias difiere desde 75,5 en la sierra hasta 89,4% en Lima.

DIFERENCIAS SOCIO - ECONOMICAS POR AREA

Educación en Pob >= 15	Costa	Sierra	Selva	Lima	Total
Analfabetismo (%)	9.1	22.1	12.0	3.6	12.7
Años de estudio (promedio)	7.5	5.8	6.2	9.3	7.4
Pob. con 7 o más años de estudio	62.5	43.7	46.9	80.1	60.0
Asistencia escolar (% en pob. 6 a 16 años)	91.4	88.2	86.4	95.8	90.3
Salud					
Pob. con problemas de salud	23.6	21.1	27.6	27.6	24.3
Pob. atendida en centros de salud	88.4	75.5	85.1	39.4	84.2

LA POBLACIÓN ECONÓMICAMENTE ACTIVA

El 67,3% de la población total del país de 14 y más años de edad, forma parte de la población económicamente activa (PEA) y este porcentaje fluctúa entre 67,0% en lima y 72,0% en la sierra.

Existen diferencias en la composición de la PEA por sectores económicos. En Lima, el 77,2% se encuentra en el sector terciario, en tanto que en la sierra y selva predomina el sector primario con 58,6% y 51,5% respectivamente.

Desde otro ángulo, en lima metropolitana el 61,7% de la PEA ocupada trabaja como independiente en tanto que el resto del Perú fluctúa entre 42,0 y 46,9%. El empleo de trabajadores familiares se hace notable en la sierra con 31,9% y en la selva con 27,6% mientras que en Lima es sólo el 5,8%.

DIFERENCIAS SOCIO - ECONOMICAS POR AREA

Población Económicamente Activa (pob >= 14 años)	Costa	Sierra	Selva	Lima	Total
Tasa de actividad (%)	61.4	72.0	67.0	67.0	67.3
Composición por sectores:					
Primario	26.8	58.6	51.5	1.8	34.3
Secundario	16.7	10.0	8.7	21.1	14.5
Terciario	56.5	31.5	39.8	77.2	51.2

NECESIDADES BÁSICAS

El INEI ha empleado desde 1993, con ocasión de los Censos de Población y Vivienda, el método de las NBI para establecer las diferencias en las condiciones de vida de la población. Con este método se encuentra que en la sierra y en la selva la población con al menos una NBI es de 65,0% y 66,2% respectivamente, en tanto que en Lima es de 22,0%.

POBLACION CON NECESIDADES BASICAS INSATISFECHA (%)

Región	Con al menos 1 NBI	Con al menos 2 NBI
Costa	33.2	11.4
Sierra	65.0	26.1
Selva	66.2	36.5
Lima	22.0	6.9
Total	45.8	18.6

Como se puede ver, existen grandes diferencias socioeconómicas entre las regiones del Perú. Los datos disponibles muestran que la condición en la costa es mucho mejor que en la sierra y selva, y que en estas dos hay mucha similitud, Esto fundamenta la consideración de tres grandes grupos poblacionales para obtener sus correspondientes canasta de consumo que sirven de base para la elaboración de la línea de pobreza, y determinar los niveles de pobreza.

DIFERENCIAS EN LOS INGRESOS

El promedio del ingreso per-cápita de los hogares es de S/. 304 (US$ 92). Este promedio nacional presenta grandes diferencias cuando se toman en cuenta las áreas geográficas. El ingreso más bajo se encuentra en la sierra, donde éste es equivalente al 54% del promedio nacional. En el caso de la costa es equivalente a 90% pero, en Lima el ingreso promedio per-cápita mensual es superior en 83% al promedio nacional.

DIFERENCIAS EN INGRESOS
(per-cápita mensual)

Area	Soles	Indice (%)
Costa	273	90
Sierra	164	54
Selva	206	68
Lima	556	183
Total	304	100

En el gráfico que sigue se puede comparar la distribución de frecuencias del ingreso percápita de las cuatro regiones, observándose una alta concentración en los valores bajos en la sierra y selva, en tanto que en Lima se presentan los valores más altos de la escala.

Ingreso percápita mensual
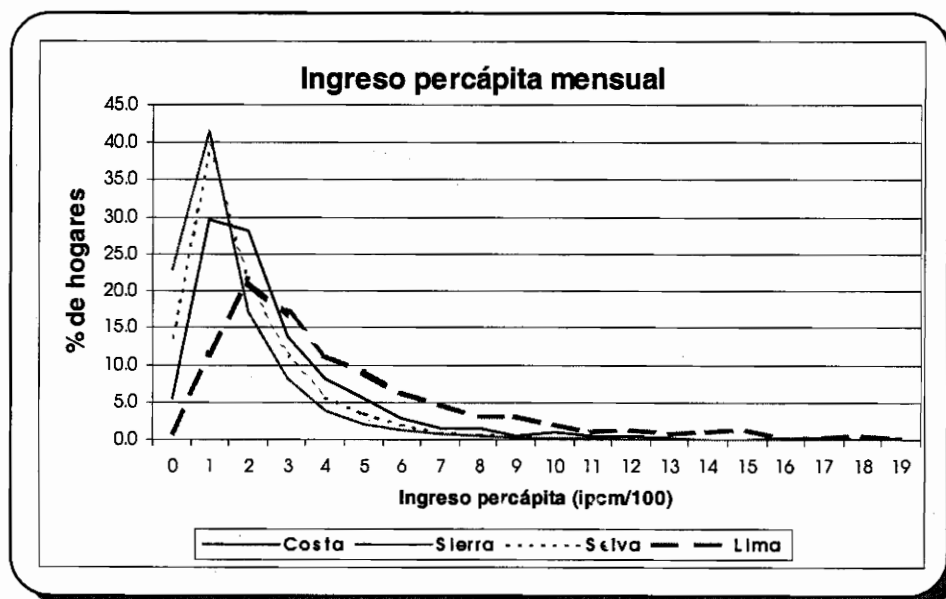
DIFERENCIAS EN LOS GASTOS

El gasto promedio mensual per-cápita es de S/. 285. (US $. 88). En este caso las diferencias a nivel regional son notables. En la sierra es equivalente al 60% del promedio nacional y en la selva al 72%. El promedio en Lima supera al correspondiente nacional en 68%.

DIFERENCIAS EN GASTOS

Area	Soles	Indice (%)
Costa	272	95
Sierra	171	60
Selva	206	72
Lima	479	168
Total	285	100

En el gráfico que sigue se observa que las distribuciones de frecuencias en la sierra y selva son muy similares y concentradas en los valores bajos, en tanto que los valores más altos están en Lima.

Gasto percápita mensual
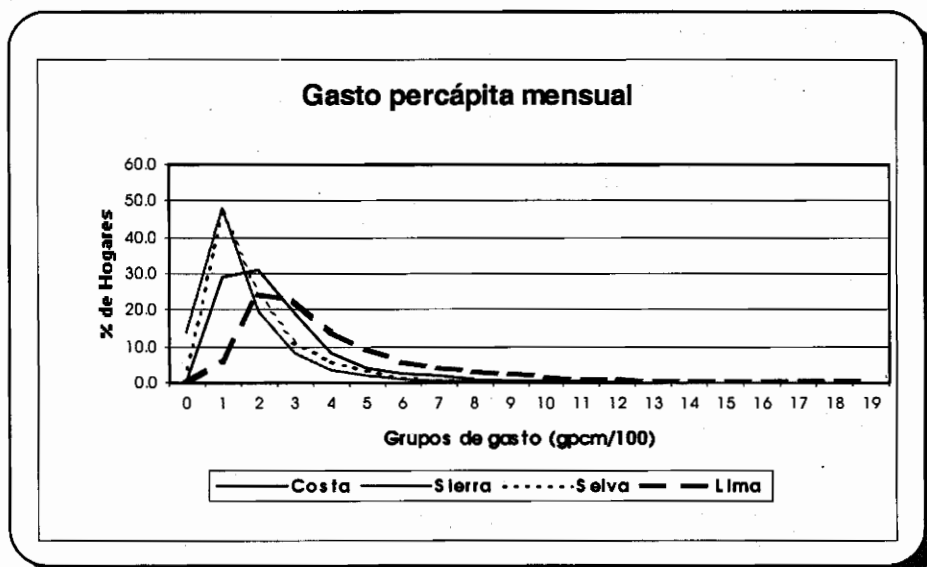
La diferencia entre ingresos y gastos promedio es de sólo 6,6% y la diferencia más notable se da en Lima, donde el ingreso supera al gasto en 16,1%.

DIFERENCIAS EN LA COMPOSICIÓN DEL GASTO

La interacción entre cantidades consumidas y capacidad adquisitiva de la población explica la disparidad que existe en la composición de las canastas de consumo. En la costa, el 46,1% del gasto corresponde a alimentos y bebidas, en tanto que en la selva es el 52,3% y en Lima, 34,4%.

Por otro lado, el 25,7% de los gastos en Lima se destinan a vivienda, en tanto que en la selva el sólo el 15,7%. En el cuadro que sigue se presenta la composición de la canasta de las diferentes regiones del Perú.

DIFERENCIAS EN LA COMPOSICION DEL GASTO (%)

Grupos de consumo	Costa	Sierra	Selva	Lima	Total
Alimentos y bebidas	46.1	51.4	52.3	34.4	42.3
Vestido	3.6	4.1	4.1	2.6	3.3
Vivienda	20.0	16.0	15.7	25.7	21.4
Muebles	3.7	2.6	5.1	4.7	4.0
Salud	4.4	3.6	3.2	3.4	3.6
Transporte	9.6	9.3	7.9	14.5	11.7
Educación	7.2	8.1	5.0	9.5	8.3
Otros	5.5	5.0	6.6	5.2	5.4
Total	100.0	100.0	100.0	100.0	100.0

Se concluye entonces que existen diferencias en los patrones de consumo de la población, razón por la cual el INEI ha considerado conveniente construir canastas de consumo diferentes para la costa, la sierra y la selva para determinar las líneas de pobreza, respetando las realidades propias de ellas.

DIFERENCIAS EN EL CONSUMO CALÓRICO

El consumo per-cápita de kilocalorías día en el Perú es de 2,919. Este valor supera en 25,9% al requerimiento calórico de 2,318 que es considerado como el umbral para el cálculo de la línea de pobreza.

DIFERENCIAS EN EL CONSUMO DE CALORIAS

Región	Kcal/día	Indice[1] (%)
Costa	3114	134
Sierra	2626	113
Selva	2878	124
Lima	3159	136
Total	2919	126

1/ Base: 2318 Kcal = 100

Se perciben grandes diferencias en el consumo calórico global entre las diferentes regiones, pues el promedio de 3159 Kcal. en Lima es superior en 20% al de la Sierra (2626 Kcal.). En el gráfico siguiente se presentan las distribuciones de frecuencias del consumo de calorías comparando las cuatro regiones en análisis. En él se puede notar que la distribución en la sierra está concentrada en los valores más bajos, y la de Lima en los más altos.

Calorias percápita diaria
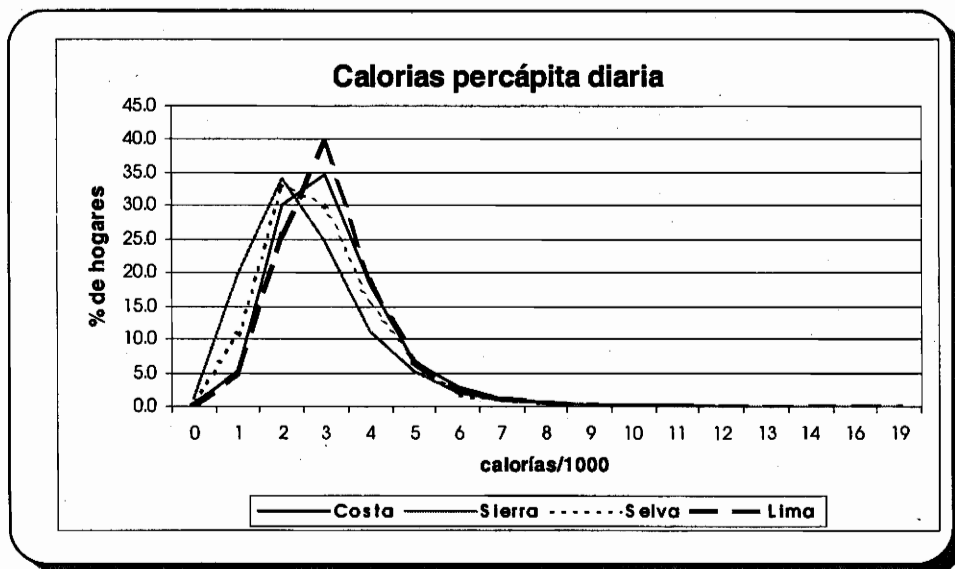
Para evaluar las diferencias en productos específicos, se han considerado los 7 principales productos que aportan el mayor número de calorías consumidas por la población. Ellos son el arroz, la papa, el azúcar, el aceite, pan, maíz y sus derivados y frijoles y productos similares.

Por ejemplo en la costa el promedio de calorías-día consumidas con el arroz es de 635, en el otro extremo se encuentra la sierra con 305. Otra fuente importante de consumo de calorías es el azúcar, cuyo consumo diario en la costa es de 357 Kcal, en tanto que en la sierra es de 235. En el caso del maíz y sus derivados, el consumo per-cápita diario de calorías en la sierra es de 330, en tanto que en la costa es de 74 y en la selva 72. Lo propio ocurre con la papa cuyo consumo per-cápita diario en la sierra es de 379 kcal., en tanto que en la selva es sólo 74.

Para evaluar las diferencias globales considerando 48 productos alimenticios, o grupos afines, que se siguen en la encuesta de hogares, se han estandarizado los consumos calóricos con índices calculados para cada región tomando como base el promedio nacional de cada item. Para tener una medida resumen de las diferencias, se han tomado las medianas de los índices de cada región. Se encuentra así que estas medianas son muy próximas entre Lima y el resto de la costa (109% y 113% respectivamente) y entre la sierra y la selva (79% y 78% respectivamente), pero, como se puede colegir, hay diferencias entre la costa, en conjunto, y el grupo de sierra y selva.

MEDIANAS DE LOS INDICES RELATIVOS DE CONSUMO CALORICO

Región	Indices
Costa	109
Sierra	79
Selva	78
Lima	113
Base promedio nacional	100

Desde otro ángulo, se evalúan también los consumos calóricos ordenados en función del gasto. Allí se puede observar que en los tramos menores de gasto hay grandes diferencias en el consumo calórico, donde el correspondiente a Lima es mucho más elevado con relación a las otras regiones, en tanto que la diferencia tiende a reducirse en los tramos más altos.

Calorías percápita diaria
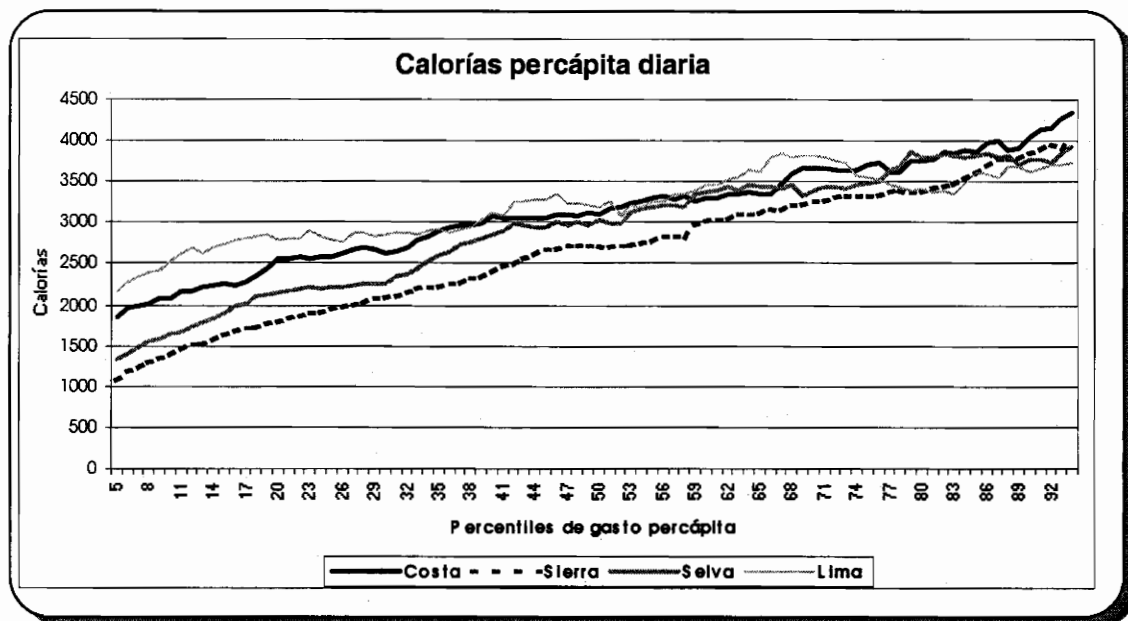
El consumo de calorías puede estar influenciado por el tipo de productos consumidos, las cantidades consumidas, y los precios de ellos. Para evaluar estos efectos se analiza a continuación las variaciones en los precios de los productos alimenticios entre regiones.

DIFERENCIAS EN LOS PRECIOS

En el cuadro siguiente se presentan los precios de los productos de mayor consumo en calorías que fueron señalados en el párrafo anterior, expresados en unidades monetarias de Perú.

DIFERENCIAS EN PRECIOS DE LOS PRINCIPALES PRODUCTOS DE CONSUMO (Soles)

Productos	Costa	Sierra	Selva	Lima	Total
Arroz	1.72	1.72	1.58	1.91	1.77
Papa	1.23	1.09	1.14	1.13	1.15
Azúcar	1.49	1.52	1.61	1.65	1.56
Aceite	3.98	3.89	4.00	4.36	4.07
Pan	3.24	3.46	4.09	4.10	3.68
Maíz y derivados	2.57	1.64	2.55	2.87	2.43
Frijoles y similares	2.95	2.56	2.63	3.44	3.04

A simple vista no se perciben grandes diferencias en los niveles de precios de los productos entre las regiones Para evaluar mejor estas diferencias se presentan las diferencias de las medianas de los índices construidos de acuerdo al criterio ya planteado en el caso del consumo de calorías. Se encuentra que las medianas entre las regiones difieren relativamente poco en comparación con las calorías. La mediana en la costa es 93,6 y en la Selva, 99,3.

MEDIANAS DE LOS INDICES RELATIVOS DE PRECIOS

Región	Indices
Costa	94
Sierra	91
Selva	99
Lima	109
Base Promedio Nacional	100

DIFERENCIAS EN LAS CANTIDADES CONSUMIDAS

Se observan grandes diferencias regionales en las cantidades consumidas de los principales productos que proveen las calorías a los pobladores. Por ejemplo, la cantidad consumida de arroz en la costa es más del doble con relación a la Sierra (177 vs 85 gramos percápita por día). En el caso de la papa, el consumo en la sierra (286 gr/día) es casi cuatro veces que el de la selva (76 gr/día). Se presenta casi la misma relación sierra – selva en el caso del maíz.

DIFERENCIAS EN CANTIDADES DE CONSUMO DE LOS PRINCIPALES PRODUCTOS (gr. o ml/día)

Productos	Costa	Sierra	Selva	Lima	Total
Arroz	177	85	142	149	131
Papa	113	286	76	160	185
Azúcar	93	61	68	92	78
Aceite	28	18	19	22	22
Pan	68	45	37	66	55
Maíz y derivados	20	91	20	13	44
Frijoles y similares	31	34	41	30	33

A manera de resumen, la mediana de índices de consumo en cantidades en la costa es 112%, y esta cifra es mucho mayor que en la Sierra (77%) y selva (82%). Estas diferencias son mucho más amplias que en los precios, por lo que las diferencias en los consumos calóricos estarían explicados fundamentalmente por las cantidades consumidas de los diferentes productos.

MEDIANA DE LOS INDICES RELATIVOS DE LOS PRODUCTOS DE LA CANASTA DIARIA DE CONSUMO

Región	Indices
Costa	112
Sierra	77
Selva	82
Lima	115
Base Promedio Nacional	100

CANASTA DIARIA DE CONSUMO DENTRO DEL HOGAR
(EN GRAMOS O MILILITROS PER-CÁPITA DIARIO)

PRODUCTOS	TOTAL	REGION NATURAL			
		RESTO COSTA	LIMA METROP.	SIERRA	SELVA
TOTAL	1402.2	1493.1	1504.9	1244.3	1463.3
1 PAN FRANCES Y OTROS PANES	55.2	67.9	66.2	44.8	37.4
2 PASTELERIA	8.8	13.8	9.2	6.4	6.0
3 ARROZ - CORRIENTE Y SUPERIOR	131.3	177.0	148.8	85.0	142.9
4 LECHE - EVAPORADA, FRESCA, EN POLVO, ETC	65.4	84.4	68.1	61.9	35.1
5 PAPA - BLANCA Y OTRAS	184.6	113.3	159.9	286.4	76.1
6 AZUCAR - BLANCA Y RUBIA	78.1	93.0	92.3	61.2	68.4
7 HUEVOS	22.9	22.1	30.4	17.1	24.3
8 CARNES DE RES Y OTRAS ROJAS	31.0	38.9	25.4	31.7	27.1
9 CARNE DE POLLO Y OTRAS AVES	43.0	48.7	74.7	18.5	32.8
10 MENUDENCIAS DE POLLO	6.1	6.3	10.0	3.1	5.5
11 SUBPRODUC.CARNE (EMBUTIDOS)	2.7	2.5	5.1	1.1	2.1
12 HIGADO DE RES	2.5	2.8	4.6	1.1	1.2
13 MONDONGO DE RES	3.5	4.0	6.8	1.6	1.3
14 OTRAS MENUDENCIAS	3.1	2.5	4.5	2.8	1.5
15 MAIZ, HARINA DE MAIZ, CANCHA Y OTRO DERIVADOS	43.7	20.4	12.6	90.8	19.9
16 TRIGO, HARINA DE TRIGO Y AVENA	25.3	17.4	15.4	42.4	12.5
17 QUINUA, HARINA DE QUINUA Y DERIVADOS	6.6	2.7	7.1	10.5	1.7
18 HARINA DE ARVEJAS, DE HABAS, DE YUCA	4.4	3.1	3.0	6.8	3.2
19 FIDEOS A GRANEL ENVASADOS, SEMOLA, ETC	38.9	40.7	44.2	35.9	33.0
20 PESCADO FRESCO Y SALADO	34.4	56.4	30.5	12.1	66.9
21 CONSERVA DE ATUN, SARDINAS Y OTROS	5.2	6.0	5.6	3.8	6.7
22 MARISCOS	1.6	3.0	2.5	0.6	0.3
23 ACEITE - BOTELLA Y A GRANEL	21.7	27.9	22.2	18.4	18.9
24 QUESO FRESCO	5.5	5.7	5.6	6.2	3.1
25 MARGARINA - A GRANEL Y ENVASADA	1.8	2.1	3.6	0.6	0.6
26 MANTEQUILLA - A GRANEL Y ENVASADA	1.4	1.8	2.3	0.5	1.7
27 OTRO PRODUCTOS LACTEOS - YOGURT, ETC	3.8	2.9	8.2	1.9	1.4
28 SAL	15.6	15.2	12.5	17.8	17.2
29 AJI	4.1	4.2	5.4	3.5	3.0
30 ESPECIES SAZONADORAS - PIMIENTA, ETC	7.0	9.1	8.7	4.0	8.4
31 LENTEJA, ARVEJA, HABA, FRIJOLES Y OTRAS	33.0	31.1	29.9	33.7	41.4
32 CEBOLLA - ROJA, BLANCA, ETC	35.8	41.2	42.1	31.1	25.3
33 TOMATE - ITALIANO, ROJO	28.9	32.8	33.6	23.7	26.2
34 ZANAHORIA, ZAPALLO	33.0	29.1	44.4	32.4	16.8
35 CHOCLO	8.0	10.5	5.2	3.2	23.2
36 CAMOTE, YUCA Y OLLUCO	60.8	68.3	40.0	36.1	164.4
37 OTRAS HORTALIZAS Y LEGUMBRES	49.6	53.4	64.4	39.9	37.4
38 LIMON	17.6	24.2	23.0	10.0	16.0
39 MANDARINA, NARANJA Y PAPAYA	50.4	53.1	73.9	30.6	50.3
40 PLATANO - SEDA, VERDE, ETC	98.7	112.5	99.7	41.3	235.6
41 OTRAS FRUTAS - MANZANA, PIÑA, ETC	41.6	50.1	48.1	20.2	73.4
42 CAFE, TE, CACAO Y OTRAS HIERBAS	5.3	5.6	5.6	4.7	5.6
43 CARAMELOS, CHOCOLATES, MIEL, ETC	3.3	3.2	1.9	2.5	8.8
44 BEBIDAS ALCOHOLICAS PARA CDH	7.9	13.4	6.6	6.7	4.8
45 BEBIDAS GASEOSAS PARA CDH	31.7	34.9	50.6	19.4	19.7
46 AGUA MINERAL Y JUGOS PARA CDH	8.4	5.7	11.7	1.8	24.6
47 COMIDAS PREPARADAS PARA CDH	16.9	19.3	17.7	13.4	20.3
49 OTROS ALIMENTOS PARA CDH 48 49	11.9	8.7	11.3	15.4	9.5

FUENTE: INEI Encuesta Nacional de Hogares 1997 - IV Trimestre

CANASTA DIARIA DE CONSUMO DENTRO DEL HOGAR
(INDICES DE CANTIDADES)

PRODUCTOS	TOTAL GRS.PER CAPITA	REGION NATURAL			
		RESTO COSTA	LIMA METROP.	SIERRA	SELVA
TOTAL	100.0	106.5	107.3	88.7	104.4
1 PAN FRANCES Y OTROS PANES	100.0	123.1	120.1	81.2	67.8
2 PASTELERIA	100.0	156.5	104.3	72.3	67.7
3 ARROZ - CORRIENTE Y SUPERIOR	100.0	134.8	113.3	64.7	108.8
4 LECHE - EVAPORADA, FRESCA, EN POLVO, ETC	100.0	129.0	104.1	94.7	53.6
5 PAPA - BLANCA Y OTRAS	100.0	61.4	86.6	155.2	41.2
6 AZUCAR - BLANCA Y RUBIA	100.0	119.0	118.1	78.3	87.6
7 HUEVOS	100.0	96.7	132.6	74.8	106.0
8 CARNES DE RES Y OTRAS ROJAS	100.0	125.6	82.0	102.2	87.3
9 CARNE DE POLLO Y OTRAS AVES	100.0	113.3	173.8	42.9	76.3
10 MENUDENCIAS DE POLLO	100.0	103.6	164.5	51.0	91.1
11 SUBPRODUC.CARNE (EMBUTIDOS)	100.0	91.2	190.8	42.6	79.5
12 HIGADO DE RES	100.0	114.1	186.0	42.9	47.8
13 MONDONGO DE RES	100.0	112.5	190.4	44.1	37.4
14 OTRAS MENUDENCIAS	100.0	83.3	148.7	91.2	47.7
15 MAIZ, HARINA DE MAIZ, CANCHA Y OTRO DERIVADOS	100.0	46.7	28.9	207.5	45.5
16 TRIGO, HARINA DE TRIGO Y AVENA	100.0	68.6	61.0	167.7	49.2
17 QUINUA, HARINA DE QUINUA Y DERIVADOS	100.0	41.0	106.6	158.3	25.1
18 HARINA DE ARVEJAS, DE HABAS, DE YUCA	100.0	70.2	67.6	153.7	71.9
19 FIDEOS A GRANEL ENVASADOS, SEMOLA, ETC	100.0	104.6	113.4	92.1	84.6
20 PESCADO FRESCO Y SALADO	100.0	164.3	88.7	35.1	194.6
21 CONSERVA DE ATUN, SARDINAS Y OTROS	100.0	115.7	108.2	73.5	129.4
22 MARISCOS	100.0	183.3	153.4	35.6	15.8
23 ACEITE - BOTELLA Y A GRANEL	100.0	128.4	102.3	84.7	87.3
24 QUESO FRESCO	100.0	102.8	101.3	112.6	55.8
25 MARGARINA - A GRANEL Y ENVASADA	100.0	117.1	199.3	35.0	35.6
26 MANTEQUILLA - A GRANEL Y ENVASADA	100.0	126.3	156.9	33.2	117.9
27 OTRO PRODUCTOS LACTEOS - YOGURT, ETC	100.0	75.6	214.7	48.8	37.0
28 SAL	100.0	97.2	79.8	113.9	109.9
29 AJI	100.0	101.1	130.4	85.4	72.6
30 ESPECIES SAZONADORAS - PIMIENTA, ETC	100.0	129.9	123.5	56.4	118.9
31 LENTEJA, ARVEJA, HABA, FRIJOLES Y OTRAS	100.0	94.2	90.5	102.2	125.3
32 CEBOLLA - ROJA, BLANCA, ETC	100.0	115.2	117.7	86.9	70.8
33 TOMATE - ITALIANO, ROJO	100.0	113.7	116.3	82.1	90.5
34 ZANAHORIA, ZAPALLO	100.0	88.2	134.5	98.0	50.8
35 CHOCLO	100.0	132.2	64.9	39.6	292.2
36 CAMOTE, YUCA Y OLLUCO	100.0	112.3	65.7	59.3	270.2
37 OTRAS HORTALIZAS Y LEGUMBRES	100.0	107.7	130.0	80.6	75.5
38 LIMON	100.0	137.0	130.3	56.5	90.8
39 MANDARINA, NARANJA Y PAPAYA	100.0	105.3	146.7	60.7	99.8
40 PLATANO - SEDA, VERDE, ETC	100.0	114.0	101.1	41.9	238.9
41 OTRAS FRUTAS - MANZANA, PIÑA, ETC	100.0	120.3	115.6	48.4	176.5
42 CAFE, TE, CACAO Y OTRAS HIERBAS	100.0	106.9	105.7	88.8	107.0
43 CARAMELOS, CHOCOLATES, MIEL, ETC	100.0	98.3	58.2	75.2	266.5
44 BEBIDAS ALCOHOLICAS PARA CDH	100.0	168.0	82.7	84.2	60.8
45 BEBIDAS GASEOSAS PARA CDH	100.0	109.9	159.4	61.1	62.1
46 AGUA MINERAL Y JUGOS PARA CDH	100.0	68.5	139.9	21.2	294.5
47 COMIDAS PREPARADAS PARA CDH	100.0	114.7	105.1	79.6	120.4
49 OTROS ALIMENTOS PARA CDH 48 49	100.0	73.2	94.2	128.5	79.5

CANASTA CALORICA DIARIA DE CONSUMO DENTRO DEL HOGAR
(EN KCAL - DÍA)

PRODUCTOS	TOTAL KCAL PER CAPITA	REGION NATURAL			
		RESTO COSTA	LIMA METROP.	SIERRA	SELVA
TOTAL	2620.3	2838.8	2687.6	2432.0	2615.7
1 PAN FRANCES Y OTROS PANES	172.3	212.9	207.6	136.6	123.2
2 PASTELERIA	31.9	49.9	33.2	23.0	21.6
3 ARROZ - CORRIENTE Y SUPERIOR	471.5	635.3	534.1	305.2	513.2
4 LECHE - EVAPORADA, FRESCA, EN POLVO, ETC	77.8	85.9	69.3	86.2	58.2
5 PAPA - BLANCA Y OTRAS	180.6	111.5	157.3	279.3	74.1
6 AZUCAR - BLANCA Y RUBIA	300.0	357.0	354.3	235.0	262.8
7 HUEVOS	32.3	31.2	42.8	24.2	34.3
8 CARNES DE RES Y OTRAS ROJAS	47.0	57.2	37.3	52.1	35.3
9 CARNE DE POLLO Y OTRAS AVES	70.7	80.2	123.0	29.8	55.3
10 MENUDENCIAS DE POLLO	9.5	9.9	15.7	4.9	8.7
11 SUBPRODUC.CARNE (EMBUTIDOS)	9.9	9.0	18.8	4.2	7.8
12 HIGADO DE RES	3.1	3.6	5.8	1.3	1.5
13 MONDONGO DE RES	3.7	4.2	7.0	1.6	1.4
14 OTRAS MENUDENCIAS	3.7	3.1	5.5	3.4	1.8
15 MAIZ, HARINA DE MAIZ, CANCHA Y OTRO DERIVADOS	158.8	74.2	45.8	329.6	72.3
16 TRIGO, HARINA DE TRIGO Y AVENA	88.2	60.4	53.6	148.0	43.5
17 QUINUA, HARINA DE QUINUA Y DERIVADOS	24.9	10.2	26.5	39.4	6.2
18 HARINA DE ARVEJAS, DE HABAS, DE YUCA	15.3	10.8	10.4	23.3	10.9
19 FIDEOS A GRANEL ENVASADOS, SEMOLA, ETC	136.5	144.6	156.8	124.2	112.0
20 PESCADO FRESCO Y SALADO	42.5	65.6	35.5	13.8	98.6
21 CONSERVA DE ATUN, SARDINAS Y OTROS	12.9	14.1	13.2	11.0	15.8
22 MARISCOS	1.3	2.4	2.0	0.5	0.2
23 ACEITE - BOTELLA Y A GRANEL	192.9	247.7	197.3	163.4	168.3
24 QUESO FRESCO	12.7	13.0	12.8	14.3	7.1
25 MARGARINA - A GRANEL Y ENVASADA	13.1	15.3	26.1	4.6	4.7
26 MANTEQUILLA - A GRANEL Y ENVASADA	10.5	13.3	16.5	3.5	12.4
27 OTRO PRODUCTOS LACTEOS - YOGURT, ETC	2.6	1.9	5.5	1.2	0.9
28 SAL	0.0	0.0	0.0	0.0	0.0
29 AJI	1.7	1.7	2.2	1.4	1.2
30 ESPECIES SAZONADORAS - PIMIENTA, ETC	7.4	7.4	7.0	8.4	5.2
31 LENTEJA, ARVEJA, HABA, FRIJOLES Y OTRAS	111.9	105.4	101.3	114.4	140.2
32 CEBOLLA - ROJA, BLANCA, ETC	17.5	20.2	20.7	15.2	12.4
33 TOMATE - ITALIANO, ROJO	5.5	6.2	6.4	4.5	5.0
34 ZANAHORIA, ZAPALLO	11.0	9.7	14.8	10.8	5.4
35 CHOCLO	10.3	13.6	6.7	4.1	30.0
36 CAMOTE, YUCA Y OLLUCO	83.5	87.8	51.4	47.0	251.0
37 OTRAS HORTALIZAS Y LEGUMBRES	16.8	17.6	21.3	14.4	12.7
38 LIMON	5.3	7.2	6.9	3.0	4.8
39 MANDARINA, NARANJA Y PAPAYA	17.1	18.1	25.3	10.3	16.8
40 PLATANO - SEDA, VERDE, ETC	85.2	96.9	86.0	35.9	203.6
41 OTRAS FRUTAS - MANZANA, PIÑA, ETC	23.9	26.0	25.0	11.3	53.8
42 CAFE, TE, CACAO Y OTRAS HIERBAS	18.8	19.5	19.3	18.2	18.5
43 CARAMELOS, CHOCOLATES, MIEL, ETC	12.5	11.5	6.8	8.8	37.9
44 BEBIDAS ALCOHOLICAS PARA CDH	2.9	4.8	2.4	2.4	1.7
45 BEBIDAS GASEOSAS PARA CDH	12.7	13.9	20.2	7.8	7.9
46 AGUA MINERAL Y JUGOS PARA CDH	1.8	1.3	2.6	0.4	5.4
47 COMIDAS PREPARADAS PARA CDH	25.2	28.9	26.5	20.1	30.4
49 OTROS ALIMENTOS PARA CDH 48 49	23.2	16.5	21.2	30.2	19.9

FUENTE: INEI Encuesta Nacional de Hogares 1997 - IV Trimestre

CANASTA CALORICA DIARIA DE CONSUMO DENTRO DEL HOGAR
(INDICE DE CONSUMO CALÓRICO)

PRODUCTOS	TOTAL	REGION NATURAL			
		RESTO COSTA	LIMA METROP.	SIERRA	SELVA
TOTAL	100.0	108.3	102.6	92.8	99.8
1 PAN FRANCES Y OTROS PANES	100.0	123.5	120.5	79.3	71.5
2 PASTELERIA	100.0	156.5	104.3	72.3	67.7
3 ARROZ - CORRIENTE Y SUPERIOR	100.0	134.8	113.3	64.7	108.8
4 LECHE - EVAPORADA, FRESCA, EN POLVO, ETC	100.0	110.3	89.0	110.7	74.8
5 PAPA - BLANCA Y OTRAS	100.0	61.8	87.1	154.7	41.0
6 AZUCAR - BLANCA Y RUBIA	100.0	119.0	118.1	78.3	87.6
7 HUEVOS	100.0	96.7	132.6	74.8	106.0
8 CARNES DE RES Y OTRAS ROJAS	100.0	121.7	79.5	110.8	75.2
9 CARNE DE POLLO Y OTRAS AVES	100.0	113.4	173.9	42.1	78.2
10 MENUDENCIAS DE POLLO	100.0	103.6	164.5	51.0	91.1
11 SUBPRODUC.CARNE (EMBUTIDOS)	100.0	91.2	190.8	42.6	79.5
12 HIGADO DE RES	100.0	114.1	186.0	42.9	47.8
13 MONDONGO DE RES	100.0	112.5	190.4	44.1	37.4
14 OTRAS MENUDENCIAS	100.0	83.3	148.7	91.2	47.7
15 MAIZ, HARINA DE MAIZ, CANCHA Y OTRO DERIVADOS	100.0	46.7	28.9	207.5	45.5
16 TRIGO, HARINA DE TRIGO Y AVENA	100.0	68.5	60.8	167.8	49.3
17 QUINUA, HARINA DE QUINUA Y DERIVADOS	100.0	41.0	106.6	158.3	25.1
18 HARINA DE ARVEJAS, DE HABAS, DE YUCA	100.0	71.0	68.4	152.6	71.6
19 FIDEOS A GRANEL ENVASADOS, SEMOLA, ETC	100.0	106.0	114.9	91.0	82.1
20 PESCADO FRESCO Y SALADO	100.0	154.5	83.4	32.4	231.9
21 CONSERVA DE ATUN, SARDINAS Y OTROS	100.0	109.2	102.1	84.9	122.1
22 MARISCOS	100.0	183.3	153.4	35.6	15.8
23 ACEITE - BOTELLA Y A GRANEL	100.0	128.4	102.3	84.7	87.3
24 QUESO FRESCO	100.0	102.8	101.3	112.6	55.8
25 MARGARINA - A GRANEL Y ENVASADA	100.0	117.1	199.3	35.0	35.6
26 MANTEQUILLA - A GRANEL Y ENVASADA	100.0	126.3	156.9	33.2	117.9
27 OTRO PRODUCTOS LACTEOS - YOGURT, ETC	100.0	75.6	214.7	48.8	37.0
29 AJI	100.0	101.1	130.4	85.4	72.6
30 ESPECIES SAZONADORAS - PIMIENTA, ETC	100.0	100.2	95.3	113.9	70.2
31 LENTEJA, ARVEJA, HABA, FRIJOLES Y OTRAS	100.0	94.2	90.5	102.2	125.3
32 CEBOLLA - ROJA, BLANCA, ETC	100.0	115.2	117.7	86.9	70.8
33 TOMATE - ITALIANO, ROJO	100.0	113.7	116.3	82.1	90.5
34 ZANAHORIA, ZAPALLO	100.0	88.3	134.7	98.4	49.0
35 CHOCLO	100.0	132.2	64.9	39.6	292.2
36 CAMOTE, YUCA Y OLLUCO	100.0	105.2	61.5	56.4	300.7
37 OTRAS HORTALIZAS Y LEGUMBRES	100.0	104.6	126.2	85.4	75.6
38 LIMON	100.0	137.0	130.3	56.5	90.8
39 MANDARINA, NARANJA Y PAPAYA	100.0	106.0	147.6	60.2	97.8
40 PLATANO - SEDA, VERDE, ETC	100.0	113.8	100.9	42.1	239.0
41 OTRAS FRUTAS - MANZANA, PIÑA, ETC	100.0	108.8	104.6	47.3	225.0
42 CAFE, TE, CACAO Y OTRAS HIERBAS	100.0	103.4	102.2	96.8	98.1
43 CARAMELOS, CHOCOLATES, MIEL, ETC	100.0	91.6	54.2	69.9	302.7
44 BEBIDAS ALCOHOLICAS PARA CDH	100.0	168.0	82.7	84.2	60.8
45 BEBIDAS GASEOSAS PARA CDH	100.0	109.9	159.4	61.1	62.1
46 AGUA MINERAL Y JUGOS PARA CDH	100.0	68.5	139.9	21.2	294.5
47 COMIDAS PREPARADAS PARA CDH	100.0	114.7	105.1	79.6	120.4
49 OTROS ALIMENTOS PARA CDH 48 49	100.0	70.9	91.3	130.1	85.5

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Poverty and Low Income Measurement in Canada: Recent Analyses and Future Directions

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CONTENTS

ABSTRACT

Statistics Canada has for the last 25 years published estimates of low income. Trends in the prevalence of low income are used extensively by analysts concerned with income distribution issues. However, these trends do not reveal whether it is the same people who find themselves in a state of low income year after year (i.e. the **persistence** of low income). Nor do studies of trends address the **severity** or depth of low income - that is, how far below the low income line is a family's income.

With the availability of new longitudinal data in Canada and through recent developments in the measurement of low income severity, researchers can now look beyond just the rates of low income. This paper summarizes some of the recent work in Canada examining the persistence and severity of low income as well as discussing future developments in the measurement of low income and poverty in Canada.

INTRODUCTION

Statistics Canada has for the last 25 years published estimates of low income. The most widely known results rely on "low income cut-offs" or LICOs, which in general are based on what the average family spends in a year on food, shelter and clothing as a proportion of their annual income. Currently a family is in low income if more than 63% of its after-tax income is needed to cover food, shelter and clothing. (See Appendix A for more information on how LICOs are calculated). The other commonly used low income measure in Canada is the LIM (low income measure) which is based on one-half of median income adjusted for family size and type. Trends in the prevalence of low income are used extensively by analysts concerned with income adequacy issues. However, these trends do not reveal whether it is the same people who find themselves in a state of low income year after year (i.e. the **persistence** of low income). Nor do studies of trends address the **severity** or depth of low income - that is, how far below the low income line is a family's.

With the availability of new longitudinal data in Canada and through the recent developments in the measurement of low income intensity, researchers can start to look beyond just the rates of low income. This paper summarizes some of the recent work in Canada examining the persistence and severity of low income as well as discussing future developments in the measurement of low income and poverty in Canada.

RECENT STUDIES ON LOW INCOME

Persistence of low income

The Survey of Labour and Income Dynamics (SLID), a longitudinal survey conducted by Statistics Canada, follows a sample of Canadians for six consecutive years. The first release of longitudinal data from the survey, *Crossing the Low Income Line* (Noreau, et. al., 1997), analyzed persons who were in low income at some time in 1993 and 1994 to see whether it was the same people living in low income from one year to the next. Based on the family's income (after taxes and government transfers), a person was classified as being above or below the low income cut-off (LICO) in each of the 2 years.

Among the key findings were -

- Canada experienced a 25% turnover in the low income population between 1993 and 1994, based on their income (after taxes and transfers). Over one million Canadians dropped into low income, while almost as many were able to climb out of their difficult financial straits.

- Children under the age of six ran the highest risk of any age group of being in low income for two consecutive years (1993 and 1994).

- Women outnumbered men in the population experiencing low income over the two years.

- Flows into and out of low income were generally the result of substantial changes in family income.

In another study, *Why do Children Move Into and Out of Low Income - Changing Labour Market Conditions or Marriage and Divorce* (Picot et al, 1999), similar questions about what causes people to move into and out of low income were addressed. In this study, however, the discussion was narrowed to and to a dichotomy of contributing factors, that is, labour market activity or changes in the family structure. Again, SLID data for 1993 and 1994 were used but in this case a logistic regression framework was used to look at the effects of changes in the parent's labour market situation and family composition in shaping the low income transition probabilities for children between the two years. Also the Low Income Measure (or LIM) was used, which was defined as 50% of the 1993 median adult-equivalent adjusted family income.

The authors found that for an individual child, a divorce or marriage could have a tremendous influence on the likelihood of entering or exiting low income. At the level of the individual, changes in family composition (when they occur) are more important than changes in jobs held by parents. However, changes in family status were relatively infrequent compared to labour market changes. Parents were much more likely to lose or find jobs, and experience changes in hours worked or wages, than they were to marry or divorce. When this is accounted for they found that, in the aggregate, flows of children into and out of low income were associated roughly equally with family compositional changes and changes in wages and hours worked.

A third study, *To What Extent are Canadians Exposed to Low Income?* (Morissette & Drolet, 1999), investigated the extent to which Canadians were exposed to low income during the 1993-1996 period, again using SLID data. This time a 4-year time interval was used for the study.

As in the previous two studies mentioned, they showed that the low income population is far from being static but in fact there is a great deal of turnover (see Table 1). Roughly half of individuals who started a spell of low income were in that state for only one year, indicating that there is a lot of movement in and out of low income. On the other hand, as many as 30% of individuals who started a spell of low income were receiving low income for three years or more. This showed that low income exhibits a non-negligible degree of persistence.

Some of the other findings of the study -

- While in a given year 1 in 10 Canadians lived in families who had a low income, as many as 1 in 5 Canadians experienced low income for one year or more during the 4-year period. Thus the experience of low income one that affects the lives of many Canadians.

- At the same time, 1 in 20 Canadians received low income continuously, i.e. for 4 consecutive years. In some types of families - such as those headed by female lone parents or whose major income earner had a disability entailing a work limitation - 25% of individuals were exposed to 4 consecutive years of low income. In some other cases - such as those involving families whose major income earner had a university diploma - individuals appear to be insulated from low income.

TABLE 1
PERCENTAGE OF INDIVIDUALS BY NUMBER OF YEARS IN LOW INCOME, 1993-1996

Characteristics	Number of years in low income					At least one year in low income
	0	1	2	3	4	
Overall	79.4	7.5	4.6	3.3	5.2	20.6
Men	81.0	7.0	4.4	2.9	4.7	19.0
Women	77.9	8.0	4.7	3.7	5.7	22.1
Age						
Less than 6 years old	73.6	8.4	5.4	4.8	7.8	26.4
6 - 17 years	76.6	8.5	5.6	3.9	5.4	23.4
18 - 24 years	67.5	13.2	7.9	4.7	6.8	32.5
25 - 34 years	79.8	7.5	4.7	3.3	4.9	20.2
35 - 44 years	83.5	6.0	3.6	2.9	4.0	16.5
45 - 54 years	83.5	5.2	3.9	2.8	4.7	16.5
55 - 64 years	80.5	7.8	3.1	3.3	5.3	19.5
65 +	87.1	4.9	2.4	1.2	4.5	12.9
Family Composition						
Unattached individual	64.2	6.8	6.1	4.2	18.7	35.8
Married/Common-law - no children	93.3	3.7	1.8	-	-	6.7
Married/Common-law - with children	86.9	4.3	2.9	2.2	3.7	13.1
Lone parent	52.4	7.2	7.6	10.4	22.7	47.6
Other	87.7	4.4	1.3	3.0	3.5	12.3
Change in family composition	70.3	13.2	7.4	4.7	4.4	29.7

Source: Survey of Labour and Income Dynamics, 1993-1996.
Note: - number too small to report

Severity of low income

As mentioned at the beginning of the paper, it is also interesting to look at the depth or severity of low income. Two recent Canadian studies have explored this aspect of low income measurement.

In the Morissette/Drolet study mentioned earlier, they also looked at severity, that is, the difference between the low income cut-off and a family's income. Some individuals may be more likely than others to receive low income during a given period of time. However, they may have higher incomes than others while experiencing low income states. In other words, a higher prevalence of low income is not necessarily associated with a greater depth of low income. (Table 2 shows the average depth of low income for various demographic groups.)

They noted that while the difference between the LICO and family income is a simple way to measure how far below the LICO a person lives, it is not appropriate for between-group comparisons. To see this, consider an unattached individual whose income is $1000 below his/her LICO and a family of six whose income is also $1000 below their LICO. Although the absolute shortfall is the same, unattached individual is worse off, in relative terms. A better measure of the depth of low income is to calculate severity in relative terms, i.e. as a percentage of the relevant LICO:

(LICO – Family income after tax) / LICO

In summary they found that -

- Individuals aged 65 and over had an average income gap 16 percentage points smaller than that of individuals aged 25-34;

- University graduates had an average income gap which exceeded 6 percentage points that of individuals with some post-secondary education.

- Individuals living in married couple families with no children were further below the LICO (by 5 percentage points) than individuals living in families consisting of married couples with children.

The authors noted that that high probabilities of being exposed to low income did not imply high income gaps. As a result, a complete understanding of the extent to which Canadians are exposed to low income requires an analysis of both the probabilities of being exposed and the income gaps while being exposed.

TABLE 2

AVERAGE INCOME GAP WHILE RECEIVING LOW INCOME, 1993-1996

(1996 constant $)

Characteristics	Average income gap = LICO - after tax family Individuals 16 and over
All	5,745
Men	6,161
Women	5,430
Adult aged 25 - 34	6,412
Elderly (65+)	1,935
High school graduates	5,656
University graduates	8,274
Not a student	5,484
Student all 4 years	7,595
Canadian born	5,420
Immigrant: before 1977	6,919
Immigrant: 1977-1986	6,546
Immigrant: 1987 and after	8,174
Visible minority	8,262
Not a visible minority	5,444
Has a work limitation	6,325
No work limitation	5,188
Unattached individuals	3,713
Married/Common-law with children	7,791
Lone parents	5,302

Source: Survey of Labour and Income Dynamics, 1993-1996
(Since the individual is the unit of fanalysis, the average individual-specific income gap was averaged across all individuals who lived in families who received low income for at least one year).

In the last study to be discussed in this note, *Social Transfers, Earnings and Low income Intensity among Canadian Children, 1981-96* (Myles & Picot, 1999) the authors looked at the trends in low income among Canadian children, taking advantage of recent developments in the measurement of low income severity.

The objective of this paper was to review a low income severity measure (Sen-Shorrocks-Thon (SST) index). This index incorporates information on the low income rate, the low income gap and the distribution of the gap. Hence, the measure is sensitive not only to changes in the share of people in low income (the rate), but also to changes in the average level and distribution of income among low income families (the gap). Changes in the social transfer system, employment opportunities or anything else that affects either (1) the number of families in low income or (2) the level and distribution of low income will be captured by the intensity measure. Therefore, the authors felt the intensity measure was a more useful instrument for analyzing low income trends and the effect of the tax/transfer system than the low income rate. To demonstrate the advantages of the intensity measure they focussed on low income among children and their findings are summarized here.

When the authors examined low income trends among Canadian children between 1981 and 1996 they showed that, among other things:

- Low income intensity among Canadian children declined somewhat through the 1980s, primarily a result of rising transfers. This change was largely invisible when measured by the low income rate, with the result that earlier studies had concluded that there was no change in low income among children over the 1980s.

- Trends in Canada for the 1990s are the result of two distinct periods. Market income fell sharply between 1989 and 1993 (the recession years in Canada) and low income intensity before transfers grew as a result. Per capita transfer payments continued rising over this period and offset a substantial share of the increase.

- In contrast, during the period of recovery from 1993 to 1996, low income intensity before transfers was relatively stable or even declined slightly, as earnings improved marginally. Government transfers, however, fell substantially, much more than earnings rose. Two-parent families were mainly affected by cuts in Employment Insurance benefits and lone-parent families by falling social assistance benefits. At least through 1996, increases in other family benefits did not offset these reductions. As a result, low income intensity was fully 20% higher in 1996 (an expansionary year) than it had been in the midst of the 1990s recession, and 50% above the low point at the peak of the last business cycle (1989).

In general, the authors concluded that trends in any low income (or poverty) rate, the most commonly used indicator of low income trends, are an imperfect guide for analyzing low income. This is in part because any improvement (or deterioration) in income among families below the cut-off are, by definition, ignored by the rate. It measures changes in the number of people in low income, not how well-off they are.

Comparisons between low income trends as indexed by the intensity measure and the rate showed that:

Changes in the low income rate usually correctly identify the direction of change in low income intensity but not always. Between 1993 and 1996, low income intensity among children rose but the low income rate measured by the LICO fell slightly. More typically, small or negligible changes in the rate can mask much more substantial change in low income intensity leading to the conclusion that there has been little or no change over periods when low income intensity was in fact rising (or falling).

- Qualitative conclusions about trends in low income intensity are not very sensitive to the choice of a lower or higher low income cut-off. Lower cut-offs tend to magnify the amount of change in some periods and deflate it in others as a function of where in the low income distribution change is taking place.

- Changes in the low income rate are not a reliable indicator of the changing impact of the tax-transfer system on low income intensity. For example, only about a third of the decline in low income intensity produced by increasing transfers in the 1980s is captured by changes in the low income rate. Rising transfers had more impact on the low income gap than the low income rate. Conversely, changes in the low income rate systematically underestimate the impact of falling transfers on low income intensity between 1993 and 1996.

FUTURE DIRECTIONS

While the previous section discussed the results of recent studies on low income, this section discusses recent developments in Canada in measuring low.

Low Income Cut-offs (LICOs)

Statistics Canada has produced information on low income since the 1960s using low income cut-offs or LICOs. Low income rates based on these LICOs are continuously in the public eye. The LICO methodology has been frequently questioned in the media and it certainly has its detractors. At the same time, Statistics Canada is often urged to continue producing this information, for two reasons: it focuses public attention on groups in society that are the most disadvantaged and, because of the long-standing time series, it can be used to monitor changes in the long term.

At the heart of the LICOs is what the average family spends in a year on food, shelter and clothing as a proportion of their annual income. Periodically, LICOs are "rebased", that is, updated to reflect the most recent information on family spending. The spending data came historically from the Canadian Family Expenditure Survey (FAMEX), generally conducted every four years. The last FAMEX was conducted in 1996. Since then, Statistics Canada has collected annual expenditure data via the Survey of Household Spending. Like FAMEX, SHS covers all expenditures but it is less detailed: the number of commodities for which specific amounts are collected was reduced by about one-third. On the other hand, the SHS sample is about 75% larger and it produces data every year.

Currently, Statistics Canada uses LICOs based on 1992 family expenditure data. Every year, the LICOs are updated for inflation using the Consumer Price Index. However, any changes in spending patterns that have occurred since 1992 are not reflected in the LICOs, or the associated low income rates. Although the information is not highlighted in data releases, LICOs and low income rates are also published on the basis of 1986 FAMEX data.

Statistics Canada has been examining options with respect to updating the LICOs and a report is being prepared to describe the issues and findings, and will propose a course of action.

Market Basket Measure

Successive governments in Canada have wanted to address child poverty through explicit policies and programs. In the past five or six years, a new program called the National Child Benefit has been implemented. The federal government department that spearheaded the program, as well as the provincial government departments responsible for social services, wanted a measure that could be used to evaluate the impact of this new program. The proposed measure is called the Market Basket Measure or MBM.

At the outset, the desired properties of this new measure were specified. First, the MBM needed to reflect a consensus view of what should be in the basket to achieve a minimum acceptable level of living. Second, the rate needed to be easy to understand; it had to lend itself readily to a good intuitive explanation, although this does not imply that it must be easy to calculate. Third, it needed to be sensitive to geographical differences in the cost of the goods and services in the basket. Fourth, it would be adjusted annually to reflect price differences and periodically to reflect changes in consumption patterns.

Some of these requirements are a direct consequence of perceived shortcomings in the LICOs. For example, the LICOs reflect differences in average spending on food, shelter and clothing by community size, but they are not sensitive to provincial variations. Also, the stress placed on ease of understanding is a reflection of the difficulties experienced in understanding the LICOs.

The approach is to cost out a "basket" of predefined "necessary" goods and services including food, shelter, clothing and transportation and a "mutiplier" to cover other essentials. The data would come from various sources – the best available for the purpose. The results would be used to define levels of disposable income needed to cover the cost of the basket. The income levels would be calculated for each province and for different sizes of community within each province. The measure of disposable income envisaged is more restrictive than the after-tax income normally calculated by Statistics Canada. It excludes such expenses as support payments, work-related child care costs and employee contributions to Employment Insurance.

Since an article on the MBM was published in the autumn of 1998 by the Canadian government department that developed the measure (Human Resources Development Canada), the MBM has received a great deal of public attention. Based on the proposed methodology, the MBM would generate an average poverty rate below the before-tax low income rate (which is the measure that has historically been high-lighted in media releases). However, it is not that different from the after-tax rate or the LIM-based rate (see Table 3).

One of many themes in the ensuing debate is that, even if the MBM should be produced regularly, it would be beneficial for Statistics Canada to continue producing LICO-based low income information as a point of comparison and for longer-term trends.

TABLE 3
INCIDENCE OF LOW INCOME - LICOS, LIMS AND MBMS (1996)

PROVINCE	LICO pre-tax	LICO post-tax	LIM post-tax	MBM*
Canada	17.9	13.5	11.5	12.0
Newfoundland	17.6	13.4	15.7	17.8
Prince Edward Island	14.5	8.2	12.6	9.6
Nova Scotia	17.8	11.6	14.9	14.9
New Brunswick	16.1	16.4	13.9	12.0
Québec	21.4	12.2	13.5	10.8
Ontario	16.1	14.4	9.9	12.5
Manitoba	19.6	12.3	12.2	11.1
Saskatchewan	17.6	13.4	13.3	12.1
Alberta	16.4	13.0	10.6	9.2
British Columbia	17.9	13.5	10.8	13.9

For illustration purposes only - estimated based on the assumptions presented in the preliminary proposal for the MBM.

APPENDIX A - HOW STATISTICS CANADA'S LOW INCOME CUT-OFFS ARE CALCULATED

A low income cut-off is an income threshold below which a family is likely to spend significantly more of its income on food, shelter and clothing than the average family. When this measure was first developed using 1959 Family Expenditure Survey data, the average family spent 50% of its pre-tax income on food, shelter and clothing. Twenty percentage points were added to this figure, on the rationale that a family spending over 70% of its income on these essentials would be in "straitened circumstances". This 70% threshold was then converted to a set of low income cut-offs that varied by family size and community size.

Since the LICOs were first introduced, average family income has increased, and the proportion of income spent on food, shelter and clothing has declined. Because the cut-offs are by design hinged to what the average family spends, they have periodically been "rebased", that is, recalculated to reflect more current spending patterns. The most recent rebasing occurred following the 1992 Family Expenditure Survey. The 1992 FAMEX results showed that the average family spent 35% of its pre-tax income on food, shelter and clothing.

In between "FAMEX years", the LICOs have been updated each year using the CPI.

Chart 1 illustrates how a LICO is calculated, using a family of four living in an urban area of 30,000 to 99,000 as an example. The 55% line represents the average proportion of pre-tax income spent by all families (regardless of size) on food, shelter and clothing in 1992, plus the 20 p.p. margin. The points on the diagram show the actual observed proportion of income spent on these basics by families of four in mid-size cities, according to the 1992 FAMEX. A regression line is fitted to the distribution and the intersection of that curve and the 55% line defines the LICO. In this case, it is about $25,000. This amount has increased somewhat since 1992 due to the CPI adjustment.

CHART 1
CALCULATION OF A LOW INCOME CUT-OFF
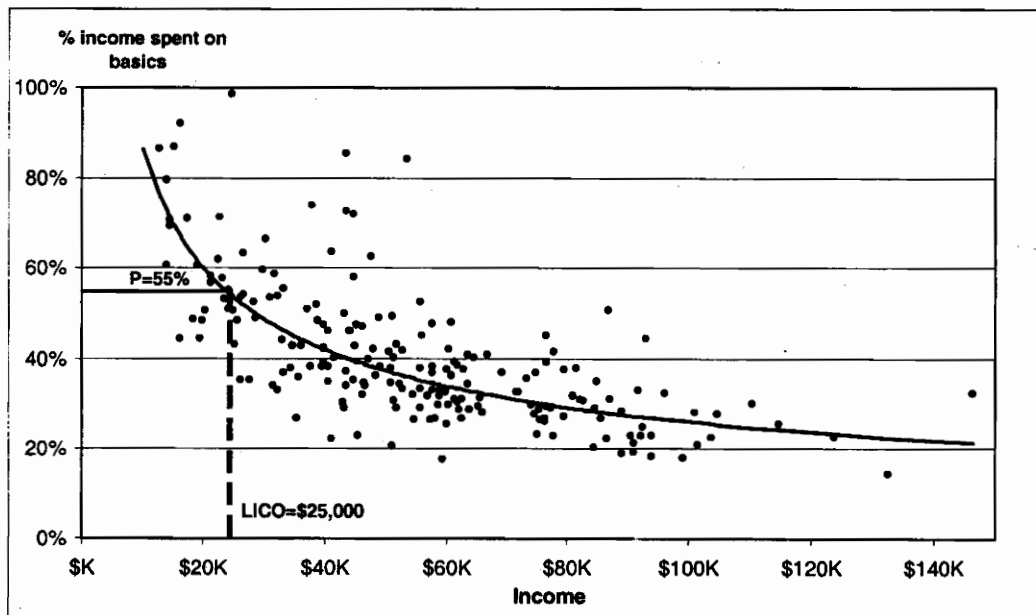
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------, 'Construction of a Preliminary Market Basket Measure of Poverty', Report by the Federal/Provincial/Territorial Working Group on Social Development Research and Information, March, 1998 (internal document).

NOTE – All of the Statistics Canada research papers are (or will soon be) available on the Statistics Canada web site (www.statcan.ca). The menu path is 'Products and Services', then 'Downloadable Research Papers (free)'.

The Use of Income for Poverty Assessment

Luis Beccaria, Pablo Perelman
SIEMPRO-ARGENTINA

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Income is a dimension usually employed in assessing welfare in general and poverty in particular. Its close relationship with utility is frequently emphasised as the latter depends on the consumption of goods and services an individual is able to purchase. From this perspective, however, expenditures should be considered a better proxy than income and therefore that variable is actually used in many analyses.

Nevertheless, income appears as a relevant variable when a non-welfarist view is considered. Proposals such as those put forward by Rawls (primary goods) and Sen (capacities) stress the convenience of considering the potential capacity individuals have to reach a given level of welfare instead of the actual level of welfare reached. The relevance of income derives, in this case, from being a basic determinant of this capacity as it conditions the possibility of obtaining goods and services through the market.

But income as it is regularly measured in household surveys —the basic data source for assessing poverty in many countries— faces important limitations when employed as a proxy either of utility or of capacity. The main reason is that in most cases those surveys only ask for incomes individuals receive during a short period of time —generally, one month—; i.e. they ask for the "current" income. As earnings may change from month to month in a significant way —they may even fall to nil when exiting employment—, this variable is not completely adequate to assess poverty. It may lead to classify certain households, which are (are not) regularly poor, as non poor (poor) in a given period. Some households whose "current" incomes lie below the poverty line may resort to resources (savings) they have in order to acquire the normative basket of goods and services. Similarly, the fact that a household's current income be above the poverty lines does not suffice as an indicator of a non-poverty situation if these earnings cannot be sustained and/or are extraordinarily higher than those usually obtained.

Resorting to current income may give rise to a highly volatile measure of poverty not so much because the usual indices (head count, intensity, severity) will show high short term variations but because important inflows of households in and out of the poverty situation will occur.

The following data for Greater Buenos Aires on poverty mobility worked out from the Argentine household survey illustrate this point. The sampling design of this survey, as of those of other Latin American current or permanent household surveys, implies that the same dwelling is visited several times. A household group may therefore be followed up during several periods and, consequently, it is possible to measure changes in the poverty status. Specifically in the case of the Argentine survey, each of the selected dwellings is interviewed in four successive waves; there are two waves in a year (reference periods for income are April and September). Consequently, 25% of the sampled dwellings is changed in each wave and 75% of the sample overlaps during two successive waves.[1] It is therefore possible to consider this group and cast up a movement matrix which classifies households according to their poverty status in both periods simultaneously.

As it can be seen in Chart 1 poverty turnover is high, the proportion of total households entering and exiting poverty —the gross change rate— varied between 11 and 16% during 1992-1999, the period under analysis [2]. It must be taken into account that those were years of price stability. As the head count ratio fluctuated around 20% (see below), those figures imply that the number of households changing poverty status amounted to nearly 50% of poor households. They indicate that during periods when poverty was rising (declining), a significant proportion of households underwent income increases (reductions). Changes in the overall poverty head count ratio are, hence, the net result of movements in both directions.

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[1]   As it will be indicated below, actual sample size is lower than that proportion due to non-response.

[2]   Difficulties exist with the first wave of 1995 and, therefore, it was not considered in the analysis.

This volatility derives both from changes in the number of earners (or in the dependence ratio) and from changes in earnings of those members already receiving an income. The first seems to be the principal reason as data in Table 1 suggest: those households exiting and entering poverty increase or decrease their dependence ratio in about one person per earner on average.

Chart 1
Poverty turnover Greater Buenos Aires 1992-1999
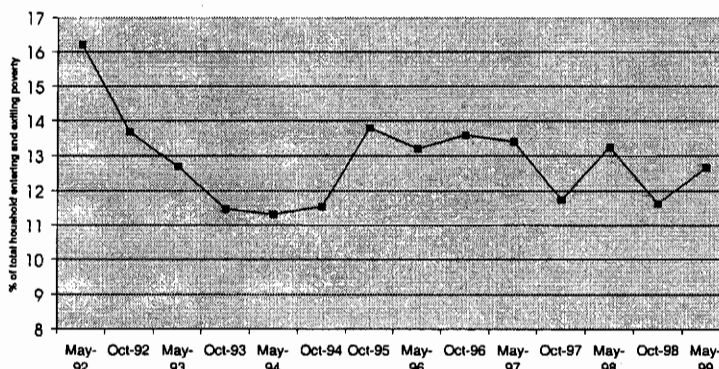
Median income of those households exiting poverty was about 75% of the poverty line while that of those entering poverty was approximately 40% higher than the normative basket and reached 75% after entering (see Table 2).

EXPENDITURE AND PERMANENT INCOME

The discussion in the previous section suggests, therefore, that "permanent income" or, at least, a less volatile definition of income —i.e. that earned during a relatively long period of time— would be a more relevant alternative to assess poverty (and welfare in general). However, this kind of variables is difficult to find in the usual data sources; consequently, expenditure is seen as an alternative as it is a good proxy for relatively long term income. It is well known that households' expenditure is less volatile than current income as it is determined by the amount of resources expected to be obtained over a period of time longer than a month (i.e. that considered in most surveys when measuring income). Even if households do not always actually transfer resources through time in order to compensate for income fluctuations, evidence shows that expenditures are more stable than current income.

Another reason for preferring expenditure to income is that measurement errors would be larger for the latter than for the former.

An often mentioned drawback of expenditure figures is that they are scarce. At least in Latin America, expenditure surveys are usually carried out once every decade and only one country in the region shows a higher frequency.

The way expenditure is measured in many income and expenditures surveys (IES) imposes another serious restriction on the use of this variable for poverty assessment, even more serious than those problems already discussed for current income. This limitation stems from the fact that IES resort to a very short reference period for food expenditure, while households carry out their food purchases with different frequencies. Specifically, in many IES one week's food expenditure is surveyed. Consequently,

many households may declare a very low (or a very high) figure if purchases are concentrated on a given week. Therefore, for many interviewed households it would be impossible to obtain a figure which could be used as an indicator of, say, total monthly expenditures.

That procedure for surveying food expenditures proves adequate when estimating aggregate expenditure figures for groups of households, one of the main goals of IES. Some households of the group would have purchased food during the reference week while others would not.

However, such procedure has serious consequences when figures for each household are intended to be used as a proxy for permanent or long term income in order to be compared to the poverty line.

A simple exercise performed with data from the 1997 Argentine IES shows how that procedure may lead to unexpected results. Poverty head count ratios were estimated making alternative use of household income and household expenditure as measured in the survey; results appear in the following figure. As it can be seen, poverty incidence is larger when expenditure is used, which is an unexpected outcome. One would have expected the opposite result in a case such as the one considered here as employment variation is the main reason for household current income change over time in a period of relative wage stability (as in 1997 in Argentina). The fact that some members become unemployed leads to a drastic reduction in current income but to a proportionally lower fall in expenditure; consequently, many households will be registering current income below the poverty line but their expenditure would be above it. A symmetric situation —a household member re-entering employment but the household consumption kept down— appears as rather less frequent.

GREATER BUENOS AIRES, 1997

Poverty Head Count Ratios (%)

	Using expenditure	Using current income
Households	21.3	14.1
Population	30.1	21.7

Source: own estimates from Argentine IES survey.

Therefore, the relationship found between the two measures makes one hesitate to use, for poverty analysis, expenditure figures at the household level as surveyed in IES such as those carried out in Argentina.

It must be clear that we are not suggesting that such procedure will always generate a bias of the sign found for Argentina when measuring poverty incidence. Difference between both alternatives —i.e. using income or expenditure— may be of any sign and it will depend on the weekly distribution of interviews and on the households weekly food purchases distribution.

AN ALTERNATIVE APPROACH

As already mentioned, the sample design of some Latin American current or permanent households surveys implies that the same dwelling is visited several times. Consequently, it is not only possible to measure changes in a household poverty status through time when looking at the household current income (as done previously), It also allows one to assess poverty (and welfare in general) using a "long term" income which results from averaging those declared in all, or in some, of the different waves during which the household is interviewed. This average income may be considered as a better variable for that purpose than current income.

In the first heading the rotating scheme of the Argentine survey was briefly described; according to it, it turns out that 25% of the sampled dwellings is changed in each wave and 75% of the sample overlaps during two successive waves, 50% during three and only 25% may be followed during four waves (i.e. two years). Furthermore, sample size does not only fall due to replacement but also because of non-response.[3] **Chart 2** indicates the actual sample size for the different alternatives. A trade-off therefore exists between the need to estimate an average income considering as many periods as possible and the need to work with a reasonable sample size.

Chart 2
Proportion of total households with valid income answers.
Greater Buenos Aires 1993 - 1999.
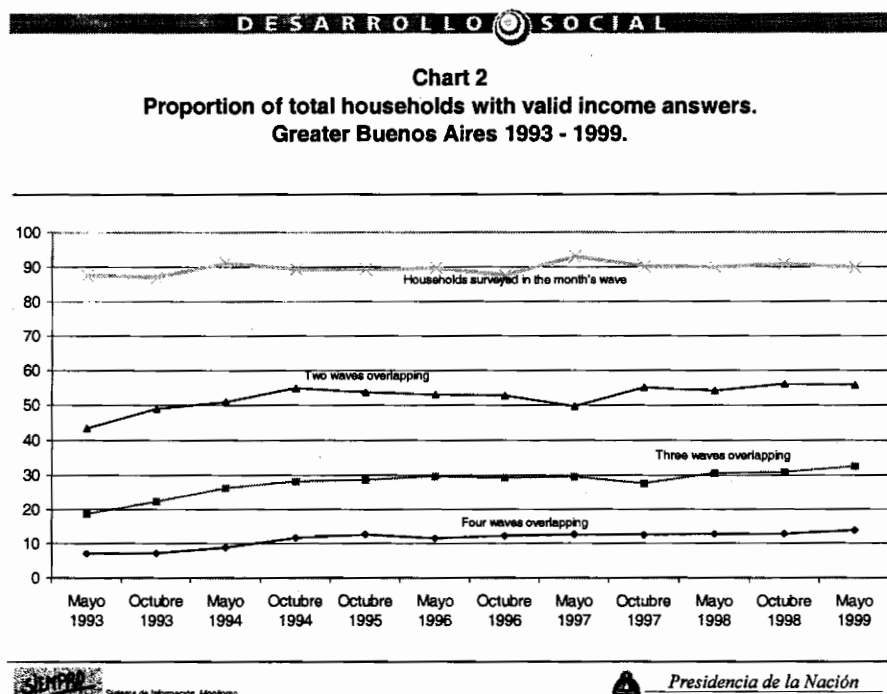
Chart 3 includes the official estimates of poverty incidence for Greater Buenos Aires together with those produced employing average incomes. In one case, the average over four waves is considered; i.e. the figure for period "t" is calculated by considering only those households with valid answers in "t-3", "t-2", "t-1" and "t". Poverty line was, in this case, compared with each household's average income in these four periods. For example, and taking also into account figures from the previous chart, it turned out that the estimate for September 1998 was calculated with only 11% of the total sample. Similarly, the three period average considers incomes of "t-2", "t-1" and "t" for each of those households with valid answers for the three periods. The two period average is worked out by averaging the "t-1"and "t' current incomes of each household.

Data produced with the four waves average behave erratically and exhibit important departures from the official figures. However, the difference narrows significantly when sample size is increased by considering the three or two period average.

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[3]   It must be taken into account that response in all the waves considered is necessary.

**Chart 3
Poverty head count ratio estimated from
Greater Buenos Aires, 1993 - 1999.**
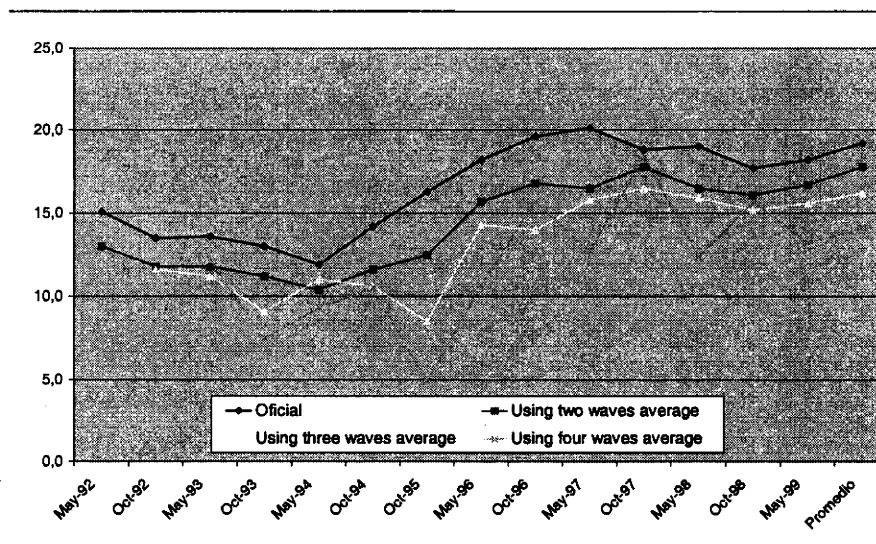
By using average income we still adhere to the view that poverty must be assessed through indicators of "capacity". Moreover, this alternative seems more related to such idea than current income and, consequently, offers those advantages usually associated with expenditure. Specifically, this approach reduces the chances of identifying as poor those households with circumstantial low income which will only unlikely be actually deprived. An example of that situation would be: households whose principal, or only bread-winner, became unemployed but which have enough savings to finance job searching; own-account workers suffering a circumstantial sales reduction.

The association of permanent income and expenditure with three or four waves' average income must not be overemphasised. As previously discussed, it should be expected that poverty incidence be almost always higher when using current income than with permanent income. This happens because when some member becomes employed —after being unemployed— current income may be only marginally higher than permanent income and, as suggested, this does not occur in the symmetric situation. Instead, when poverty incidence estimated with current and average income is compared, it is possible that when unemployment falls the use of the former indicator lead to lower poverty incidence. However, as most unemployment spells are relatively short, this possibility does not appear as very probable.

One advantage of the alternative approach suggested is that it may smooth the effect on poverty incidence (and other indicators) of short-term economic fluctuations. Consequently, a better definition of the group of households actually affected by deprivation is also obtained.

The following Figure shows for October 1997 that while 5.4% of total households registered an average income above the poverty line but a current income below it, 2.5% was in the opposite situation.

POVERTY STATUS ACCORDING TO CURRENT AND AVERAGE INCOME (% OF HOUSEHOLDS)

Using average income	Using current income		
	Poor	Non-poor	Total
Poor	13.4	2.5	15.9
Non-poor	5.4	78.6	84.1
Total	18.9	81.1	100.0

TABLE 1
DEPENDENCE RATIO OF HOUSEHOLDS ENTERING AND EXITING POVERTY. GREATER BUENOS AIRES, 1992-1999

	May-92	Oct-92	May-93	Oct-93	May-94	Oct-94	May-95	Oct-95	May-96	Oct-96	May-97	Oct-97	May-98	Oct-98	May-99	Average
Dependence ratio 1/																
Before																
Entering	2,5	2,4	2,7	2,5	2,5	2,5	2,4	2,5	2,5	2,3	2,3	2,4	2,5	2,4	2,3	2,4
Exiting	3,4	3,3	3,3	3,5	3,6	3,3	3,7	3,7	3,2	3,4	3,2	3,2	3,2	3,1	2,9	3,3
After																
Entering	3,5	3,6	3,8	4,2	3,5	3,6	3,8	3,4	3,5	3,2	3,5	3,4	3,3	3,1	3,1	3,5
Exiting	2,5	2,6	2,3	2,5	2,4	2,3	2,2	2,5	2,4	2,3	2,1	2,2	2,2	2,2	2,2	2,3
Difference																
Entering	1,0	1,2	1,2	1,7	1,0	1,1	1,4	0,9	1,1	0,9	1,2	1,0	0,9	0,7	0,8	1,1
Exiting	-0,9	-0,8	-1,0	-1,1	-1,2	-1,0	-1,4	-1,2	-0,8	-1,2	-1,0	-1,0	-1,0	-1,0	-0,7	-1,0

1/ Number of household's members divided by the number of income earners members

TABLE 2
POVERTY GAPS. GREATER BUENOS AIRES, 1992-1999

	May-92	Oct-92	May-93	Oct-93	May-94	Oct-94	May-95	Oct-95	May-96	Oct-96	May-97	Oct-97	May-98	Oct-98	May-99	Average
														(median income / poverty line)		
Entering poverty																
Before	1,45	1,66	1,47	1,43	1,47	1,49	1,76	1,39	1,39	1,44	1,42	1,40	1,47	1,30	1,39	1,46
After	0,78	0,76	0,72	0,70	0,77	0,77	0,69	0,77	0,75	0,76	0,66	0,71	0,76	0,75	0,75	0,74
Exiting poverty																
Before	0,79	0,80	0,80	0,81	0,68	0,78	0,70	0,74	0,79	0,74	0,71	0,73	0,71	0,75	0,74	0,75
After	1,66	1,48	1,53	1,52	1,61	1,48	1,72	1,31	1,42	1,35	1,42	1,43	1,36	1,38	1,32	1,47

Equivalence Scales
A Brief Review of Concepts and Methods[1]

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ECLAC

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[1] This document is an abridged translation from the original in Spanish: "Escalas de Equivalencia: Breve Reseña de Conceptos y Metodos", CEPAL (1999).

CONTENTS

1.   INTRODUCTION

In measuring "well-being", household income (or consumption) is usually used as a suitable indicator of the level of living. The most elementary option is to use total income, which would mean that two households with the same income have the same level of well-being, regardless of their size or other characteristics. The use of per capita income partly solves this problem, since it takes account of the number of persons in the household. However, this variable assumes that all individuals' needs are the same and that there are no economies of scale in consumption. This runs counter, for example, to the evidence that children need a smaller budget than adults to satisfy their food and clothing needs, and moreover it is not compatible with the idea that two persons living together can cover their needs in terms of heating and housing without needing to spend twice as much as a person living alone.

Equivalence scales are indexes that measure the relative cost of living of families of different sizes and compositions. They are made up of two elements: the "consumer unit equivalence", which takes account of the needs of the household members according to their characteristics, and "economies of scale", which mean that the marginal cost goes down with the addition of new members to the household.

In the literature, equivalence scales are usually classified as follows: a) "behaviour" scales, estimated on the basis of the observed expenditure of households; b) "parametric" scales, which explicitly reflect the "equivalence" and "economies of scale" elements; c) "expert" scales, which are constructed on the basis of the criteria used by researchers, and d) "subjective" scales, estimated on the basis of individuals' perceptions of their own needs. In line with this logic, the methods most frequently used to estimate equivalence scales are analysed below.

2. EQUIVALENCE SCALES BASED ON OBSERVED EXPENDITURE

2.1   Theoretical framework

Following the ideas of Tsakloglou (1991), let us assume a utility function for heads of households which depends on the quantity of goods consumed in the household (q) and its demographic characteristics $(z)_2$:

$$u = u(\mathbf{q}, \mathbf{z})$$

Then, we can obtain a "cost function" which indicates the minimum expenditure on goods (x) required for a household of composition z to reach utility level u when prices are $\mathbf{p}$:

$$c(u, \mathbf{p}, \mathbf{z}) = x$$

The equivalence scale is obtained by dividing the cost function of household h by the cost function of the reference household, for given levels of prices (p^0) and utility (u^0):

$$\mu^h = \frac{c(u^0, \mathbf{p}^0, \mathbf{z}^h)}{c(u^0, \mathbf{p}^0, \mathbf{z}^0)}$$

As set forth here, the equivalence scale μ cannot be estimated, because the level of utility u is not observable. However, it is possible to empirically estimate demand functions which depend on observable variables. Generally speaking, the methods for constructing equivalence scales presented in

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[2]   Symbols in bold-face type, such as p and z, correspond to vectors.

this section can be interpreted as different ways of estimating these demand functions. Expenditure on good i is given by:

$$p_i * q_i(x,\mathbf{p},\mathbf{z}) = \frac{\partial\ c(v(x,\mathbf{p},\mathbf{z}),\mathbf{p},\mathbf{z})}{\partial\ \ln p_i}$$

Pollak and Wales (1979) consider that this procedure is not appropriate for making welfare comparisons, because the observed demand is "conditional" on the size of the household and therefore does not reveal the household's preferences with regard to the number of members in it. According to these authors, the only valid way of making welfare comparisons is through "unconditional" preferences: that is to say, utility functions that are maximized by choosing both the quantity of goods to be consumed and the family size. Other criticisms of the welfare assumptions in the estimation of equivalence scales may be found in Fisher (1987) and Nelson (1993).

2.2   Engel method

The most frequently used method for constructing equivalence scales is that of Engel (1895). It assumes that the greater the proportion of expenditure allocated to the purchase of food, the lower the level of well-being of the household. If two households spend the same proportion of their budgets on food (i.e., they have the same level of well-being), the relation between the total expenditures of the two households will give an index of the cost of maintaining the first household compared with the second, and this index will be the equivalence scale. This is applicable not only to expenditure on food but also to spending on any good displaying the same empirical regularities ("Iso-Prop" method, Watts, 1967).

In order to construct equivalence scales by this method, we must estimate an "Engel curve" for the proportion spent on food. Let us take, for example, the following functional form:

$$w_f = \alpha + \beta\ \ln(x/n) + \sum_i \gamma_i n_i + \varepsilon$$

where x = total expenditure, n = total number of persons in the household, n_i = number of persons in category i (examples of categories are: children from 0 to 6 years of age, from 6 to 12, etc.), α, β and γ are parameters, ε is an error term, and $\ln(x/n)$ is the natural logarithm of per capita income.

If x^* is the expenditure that household h must make to maintain the same level of utility as the reference household (whose expenditure is x^0), and if both households devote the same proportion of their expenditure to the purchase of food, then x^* would be defined by:

$$\alpha + \beta\ \ln(x^*/n^h) + \sum_i \gamma_i n_i^h = \alpha + \beta\ \ln(x^0/n^0) + \sum_i \gamma_i n_i^0$$

Solving for the expenditure variables, we obtain the equivalence scale:[3]

$$\mu = \frac{x^*}{x^0} = \frac{n^h}{n^0} \exp \sum_i \left[\left(\frac{\gamma_i}{\beta}\right)\left(n_i^0 - n_i^h\right)\right]$$

Nicholson (1974) shows that expenditure on food is not an appropriate indicator of well-being. His argument is as follows: Let us assume that an adult couple have just had a child and receive an income compensation which allows them to maintain their previous level of living. As the child spends most of his budget on food, the total proportion of expenditure devoted to the purchase of food will be greater than before the arrival of the child, although the family's level of living has not worsened. Consequently,

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[3]   The term $exp(x)$ is equivalent to e^x, where e is the base of the natural logarithm *(ln)*.

Engel's method overestimates the compensation needed to maintain the family on its initial indifference curve. Such overestimation also occurs because the limited economies of scale in food consumption are not representative for other goods such as housing, etc. These observations are consistent with the findings of Tsakloglou (1991) and Deaton and Muellbauer (1986).

Although it has the great advantage of simplicity, Engel's method is rejected as a valid option for estimating equivalence scales, both because of the weakness of its theoretical bases and the implausibility of its implications, including its assumption that the relation between the needs of children and adults is the same for all goods.

2.3   Rothbart method

Instead of expenditure on food, Rothbart (1943) suggested using a group of goods consumed only by adults, termed "adult goods". The idea is that the incorporation of a child into the family involves fresh expenditure which is financed by reducing the budget for goods not consumed by children. If it is assumed that the spending on "adult goods" (such as cigarettes and liquor) reflects the well-being of the adults in a household, the equivalence scale is given by the quotient between the total expenditures of two households with different sizes whose spending on "adult goods" is the same. Using this method, it is also possible to calculate the "cost of a child": that is to say, the monetary compensation needed to permit a household to spend the same proportion of its budget on "adult goods" as it did before the incorporation of the new member. The empirical estimation of equivalence scales by this method follows the same procedure as was set forth for Engel's method, subject to prior identification of the "adult goods" to be used.

The literature comparing the Engel and Rothbart methods tends to prefer the latter. This does not mean that Rothbart's method is free from defects, however. Among such defects is the fact that this method assumes that the presence of children has an income effect only on the consumption of the parents, but this is not so when there are "family" goods (public goods in the household). Among the practical limitations, it should be noted that this method is only useful for estimating equivalence scales for children, since it requires that the additional member of the household should not consume "adult goods".

There are a number of arguments showing that the Rothbart method underestimates the equivalence scales. Thus, Gronau (1988) notes that when the parents derive utility from the consumption of their children, the marginal propensity to spend on "adult goods" is reduced by the presence of additional children. In addition, Tsakloglou (1991) mentions that some "adult goods" tend to be inelastic with respect to income, so that they do not adequately reflect the "cost" of an additional member in the household.

2.4   Prais and Houthakker (PH) method

This method –based on Sydenstricker and King (1921)– is a generalization of the preceding methods, as it estimates a system of Engel curves for each good (or group of goods) consumed in the household. The Engel curves have the following form:

$$q_i(x, \mathbf{z}) = m_i(\mathbf{z}) g_i\left(\frac{x}{m_0(\mathbf{z})}\right)$$

where $m_0(\mathbf{z})$ is interpreted as an "income scale" and $m_i(\mathbf{z})$ corresponds to "specific scales" for each good. The first function measures the relative income required by households of different compositions to attain the same level of well-being, while the second measure the relative expenditure on good i by the different demographic groups in the household. Thus, a household with children will have higher

"specific scales" for goods such as "children's food" and "education" than a household made up only of adults; this will be reflected, in turn, in a higher "income scale".

The most obvious advantage of this method is that it does not assume that the addition of a new member to the household has the same effect on the consumption of all goods, as Engel's method does. There are certain extreme assumptions behind this method, however, such as the assumption that the crossed elasticities are zero. Moreover, Muellbauer (1974) shows that the model is under-identified and that it is not possible to estimate equivalence scales without placing restrictions on some of the specific scales. According to Deaton (1997), it could be assumed that the specific scale for "adult goods" is equal to 1, but in this sense it is open to question whether this complicated method really represents a contribution compared with a simpler methodology such as that of Rothbart.

2.5   Barten method

Like the method of Prais and Houthakker, the method by Barten (1964) proposes a system of demand equations, but unlike the methods analysed earlier this incorporates the possibility that prices may vary. As it is more general, this method embraces the three methods already analysed, subject to certain special restrictions.[4]

In this method, the demand functions have the following form:

$$q_i = m_i(\mathbf{z}) * h_i\left(x, p_1 m_1(\mathbf{z}), ..., p_n m_n(\mathbf{z})\right)$$

where $\mathbf{z}$ is a vector of demographic characteristics vector and $m_i(\mathbf{z})$ determines the proportion of each good i consumed by the parents (Deaton and Muellbauer, 1986). When a new member is added to the household, the demographic characteristics can affect demand in two ways: (a) a "direct" positive effect on demand, corresponding to the increase of the factor m_i as a result of the greater "needs" caused by an additional member, and (b) an "indirect" effect due to the change in "effective" prices $(p_i m_i)$ of the parents' consumption, resulting in the replacement of more expensive goods by cheaper ones. This latter effect lends greater theoretical weight to Barten's method, as it is not present in any of the earlier methods.

It should be noted that this methodology implicitly assumes that both the reference household and the household with children consume the same goods, which is not consistent with the case of a good such as diapers. This problem can be solved by using the modification suggested by Gorman (1976), who adds a number of fixed costs associated with children to Barten's cost function.

In general, Barten's method is of limited applicability, as it requires data with price variations for its estimation. With regard to the soundness of the assumptions made in this model, the empirical evidence seems to reject the independence of the $m_i(\mathbf{z})$ functions with respect to quantities, income and prices (Nelson, 1992).

3. "PARAMETRIC" SCALES

An option which is not based directly on observed behaviour is provided by "parametric" scales. These are scales constructed on the basis of a standard functional form, with explicit parameters that reflect the economies of scale in consumption and the different needs of the household members.

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[4]   Only if the couple is takes as the reference unit for all the methods, and not an adult or other member. Nelson (1993) notes that this assumption is open to objection, since the concept of well-being used leaves out the welfare of children.

One possibility is to establish the equivalence scale entirely as a function of the economies of scale in consumption. In this case, the scale is given by n^θ, where n is the number of members in the household and θ is the parameter for economies of scale ($\theta = 0$ corresponds to absolute economies of scale; $\theta = 1$ corresponds to the absence of economies of scale). According to Buhmann and others (1988), this functional form adequately represents other scales estimated on the basis of observed expenditure, even though it does not take other demographic characteristics into account. Some studies by the Organization for Economic Cooperation and Development (OECD) and the Statistical Office of the European Community use an equivalence scale of this type, taking a value of θ equal to 0.5 (Burkhauser and others, 1996).

It is also possible to develop a parametric scale entirely as a function of the relative needs of the household members. An example of this is the OECD scale, which can be written as $[1.0 + 0.7(A-1) + 0.5K]$; i.e., the first adult has a value of 1.0, each additional adult is equivalent to 0.7 of the first adult, and each child under 14 is equivalent to 0.5 of the first adult. Similarly (but assuming lower equivalences) the "modified OECD" scale uses parameters corresponding to 0.5 for each additional adult and 0.3 for each child (De Vos and Zaidi, 1997).

A more "complete" parametric scale has been proposed for the construction of the United States poverty line (Citro and Michael, 1995). This scale has the form $(A + pK)^F$, where A is the number of adults in the family, K is the number of children, p is the proportion of a child's needs compared with those of an adult, and F is the economies of scale factor.

Generally speaking, the growing use of these scales is due to the ease with which they can be applied and understood. They are often criticised for the arbitrary manner in which they select parameters, although this can be corrected by choosing values that are consistent with observed behaviour.

4. "EXPERT" AND SUBJECTIVE SCALES

4.1 "Expert" scales

An "expert scale" is one constructed on the basis of the views of expert social analysts, using different types of information and usually taking into account the specific use to be made of the scale (Buhmann and others, 1988)[5]. The "expert scale" most often cited in the economic literature is that of Orshansky, which is actually a by-product of the poverty lines for various types of United States households.

Citro and Michael (1995) mention some criticisms of this method, generally aimed at the fact that these scales depend largely on nutritional criteria. These criteria may not coincide with reality, and moreover they fail to reflect the economies of scale in the consumption of "family goods". In short, this method has gained little acceptance, and its use for the construction of equivalence scales is not usually recommended.

4.2 "Subjective" scales

As in the previous case, subjective scales are a by-product of the construction of subjective poverty lines. These are calculated on the basis of the interviewees' perception of what they consider to be the minimum income essential for survival. For this purpose, surveys usually include a "Minimum Income Question" along the following lines: "What do you consider to be the minimum amount of money needed for the survival of a family of four persons?" (Danziger and others, 1984).

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[5] Although "parametric" scales could also correspond with this definition, the information they use is not limited to that coming from "experts". Our classification is based on the way equivalence scales are constructed and not the source of the information used.

The empirical evidence shows that the higher the income level of the respondent, the higher tends to be the income that he considers to be a minimum for survival. On the basis of this, it is assumed that those households which consider that this minimum income would be similar to that which they receive themselves are those that give the "true" answer, i.e., the poverty line. The equivalence scales are obtained by dividing the subjective poverty line of a household by that of the reference household.

Although many authors acknowledge the potential of subjective information in measuring well-being, this method has not won general acceptance in the construction of equivalence scales. Its results are not usually easy to accept, as they generally involve excessive economies of scale.

5. EFFECTS OF THE USE OF EQUIVALENCE SCALES

A first option for evaluating the implications of the use of equivalence scales is that developed by Buhmann and others (1988). That study approximates a wide variety of equivalence scales by means of a parametric scale with a single parameter corresponding to economies of scale. The results show that the value of the parameter for "subjective" scales is usually around 0.25, that of "behaviour" scales averages 0.40, while that of "expert" scales exceeds 0.60. In short, "subjective" scales generate high values of economies of scale while "expert" scales give very small economies of scale, in line with what was noted earlier.

Coulter, Cowell and Jenkins (1992) make a theoretical analysis of the effect of using an equivalence scale on the measurement of poverty and income distribution, using a parametric scale of the same type as that of Buhmann and others (1988). These authors find that changes in the parameter of economies of scale are typically reflected as a U-shaped relation between the social indicator and the parameter in question, both for income distribution and for poverty. This means that if the value of the parameter is gradually raised from 0 to 1, first there is a reduction in the indicator (either a reduction in poverty or an improvement in income distribution), but after reaching a minimum level the indicator gradually begins to rise again.

The prediction of a U-shaped relation is compatible with the empirical findings of various studies, including those of Coulter and others (1992), Buhmann and others (1988) and Figini (1998). With regard to the magnitude of the changes in the measurement of income distribution and poverty, several studies generally concur that the aggregate measures do not display major variations as a result of changes in the equivalence scale. However, the demographic structure of households ranked by income levels may register important changes. It should be noted that these empirical observations are based on the use of relative poverty lines and refer to developed countries, so that their conclusions are not necessarily applicable to other situations or ways of measuring poverty.

6. CONCLUSIONS

The arguments set forth in this paper clearly indicate that no method is categorically superior to another. The "subjective" and "expert" methods are often rejected for not having an acceptable theoretical basis for measuring welfare. Although the methods developed by Engel and Rothbart have the advantage of being simple and easy to estimate, both of them generate biased scales. The methods of Prais and Houthakker and of Barten have more solid theoretical bases, but unfortunately their estimation is a complicated matter, they are not suitably identified, and they require very large data bases.

Among the advantages of parametric scales is their ease of construction, which makes it possible to establish a clear separation between the "needs" effect and the "economies of scale" effect. In spite of their simplicity, they give quite acceptable approximations to the results obtained by using methods with

a better theoretical base. The selection of values for the parameters could be totally arbitrary, however, unless based in some way on observed behaviour.

Generally speaking, studies which evaluate the impact of using equivalence scales on the measurements of income distribution and poverty do not find any major effects on the aggregate measurements, but such effects are observed on the demographic structure of households below the poverty line. However, these conclusions are not necessarily applicable to developing countries or those where the poverty line used is absolute.

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SESSION 2:

EUROPEAN AND INTERNATIONAL EXPERIENCE TO MOVE TOWARDS COMMON PRACTICES IN THE MEASUREMENT OF POVERTY

European Experiences in Household Income Statistics

PIETER EVERAERS
EUROSTAT

CONTENT OF PRESENTATION

Page

1.   HARMONISATION OF CORE VARIABLES

Objectives

- a set of harmonised variables (internal Europe),
- to compare data from different sources
- to combine information from different sources
- to build a European System of Social Statistics

Approach

- define the core variables
- agree on definitions and operationalisations
- program to implement in national and international stat. Sources

A 'Total approach' for European Social Statistics (shaping the best environment)

- Perfect harmonization at the level of variables
- Stimulate input as well as output harmonization
  - input via best practices in (Common) questionnaires, and developing standard tools (linking and questions)
  - output via best practices and developing standard sets of tables
- A standard set of meta documentation

Some examples of key social indicators

Eurostat Key Social Indicator	EU 15
Percentage of 18 years old not in education	26 ('96)
Employment rate 15-64 years old (% of population)	60 ('97)
Youth unemployment/population ratio	10 ('97)
Percentage of persons in low-income households	18 ('94)
Hourly earnings of women as a percentage of men's	78 ('95)

Core variables

Disentangle the numerator and the denominator of the key social indicators in their core components

these are the core variables to be available on a sufficiently high level of harmonization

Some examples of core variables

Variable

Private household

Educational attainment

Hours worked

Labour status

Disposable income

Meta information

The recommended concepts and definitions and the used concepts and definitions in all sources for social statistics

- via inventory and electronic documentation

The measurement rules for the key social indicators

- a methodology handbook

Templates for best questions etc.

- Electronic documentation

Procedures for producing the tables

- a methodology handbook

2. HARMONISATION OF THE INCOME VARIABLE

Objective

A concept and agreed operationalisation of household income in as much sources as possible.

'Comparable income analysis on a regional level' and for small categories.

Stepwise process

- agree on area and definition in international forum
- define a work definition
- operationalize in a set of variables and schemes
- via iterations to the best match of theory and practice
- develop statistical tools
- UN Nations 1977 recommendations, revised in provisional guidelines (DICAH, 1998)
- define provisional components (for further work) (recommendations TFSEP, CANBERRA GROUP)

Iterations

- first inventory exercise (TFSEP)
- availability and accessibility of the components (INVENTORY 'De Wreede' and RAR'S, 1999)
- discussion on the 'gaps' (December 1999)
- 'international comparability' project
- link to Canberra group recommendations '00

Disposable income

Income from Activity (4 components)

Income from property (1)

Transfers received (2)

Compulsory payable transfers (3)

Voluntary transfer payments (1)

Gaps

- Income in kind (e.g. imputed rent)
- Transfers (private and public)
- Income Assets
- Income from self employment

3.   THE EU RECOMMENDATIONS ON STATISTICS ON SOCIAL EXCLUSION AND POVERTY

- DISPOSABLE INCOME
- ECHP (annual)
- MEDIAN, THREE CUT OFF POINTS, ODIFIED OECD SCALE, INDIVIDUALS UNITS OF DISTRIBUTION AS WELL AS UNIT OF ANALYSIS
- SOCIAL EXCLUSION MULTIDIMENSIONAL PROBLEM

Objectives of the presentation

- General ideas on combining data (sources) (1,2,3)
- State of the art in combining sources in EU Member States (4)
- A possible direction of European Social Statistics (5)

Content of the presentation

1. FUNCTION OF SOCIAL STATISTICS
2. USER NEEDS
3. INPUT AND OUTPUT HARMONIZATION
4. NATIONAL PRACTICES
5. TO AN INTERNATIONAL REFERENCE DATA BASE ORIENTED STRUCTURE

1. FUNCTION OF SOCIAL STATISTICS

- Identify
- Monitor
  - Issues of social concern
- Evaluate policies
  - With respect to these issues
- Provide data for projections

Sources

Output

Throughput

Input

KEY FIGURES (sna)

Facts and figures, yearbooks

Thematic descriptions

(Reconciled) tables

Micro data

DATASOURCES

Surveys

Administrative sources and registers
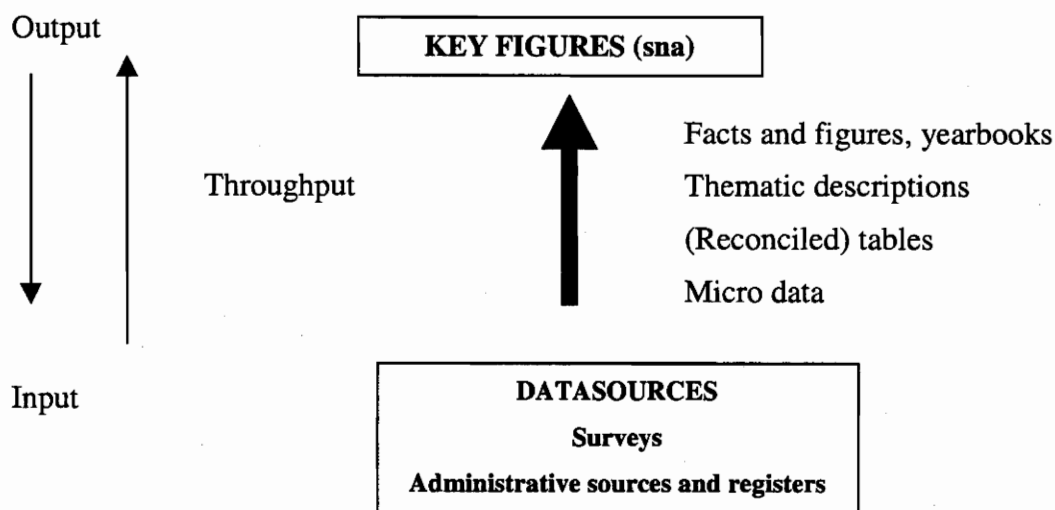
2. USER NEEDS

- Authoritative information (accurate/timely)

- Short to medium term developments

- policy relevance (fit to specific policies)

- be dis-aggregated to relevant categories (small/specific/low incidence

- to be used on a regional level

- consistent in time (time series)

- allow longitudinal analysis (esp. for dynamic convergence analysis)

Demand for tables or microdata

Tables   Permanent needed indicators

                Governmental Public inform

> stable, actual relevant, plausible
> total coverage

Microdata   Ad hoc, specific research questions

                Academic

> Flexible, causal relations, multi
> dimensional

Approaches to indicators

- from different isolated sources
- from a comprehensive survey
- from different isolated accounting systems
- from linked accounting systems
- from integrated micro data bases

Required basic information

Accuracy   - harmonised concepts
                - developing meta data
                - combined use of sources
                - consistency between micro, meso and macro level

Relevancy   - policy oriented (long run)
                - timely indicators on the performance
                - indicators for comparisons across regions (countries)

Authority   - consistent series of key indicators
                - avoiding the publication of conflicting information
                - short term indicators as preliminary results
                - links between time series and integrated statistical systems
                - developing indicators of data quality

3. INPUT AND OUTPUT HARMONIZATION

| KEY FIGURES | ← | A consistent set of statistical information |

ACCOUNTING

OUTPUT   SYSTEMS

HARMONIZATION   WEIGHTING

IMPUTATION

INPUT   LINKING

HARMONIZATION   INTEGRATION

DATASOURCES

COMBINING DATA

micro —— table —— indicator
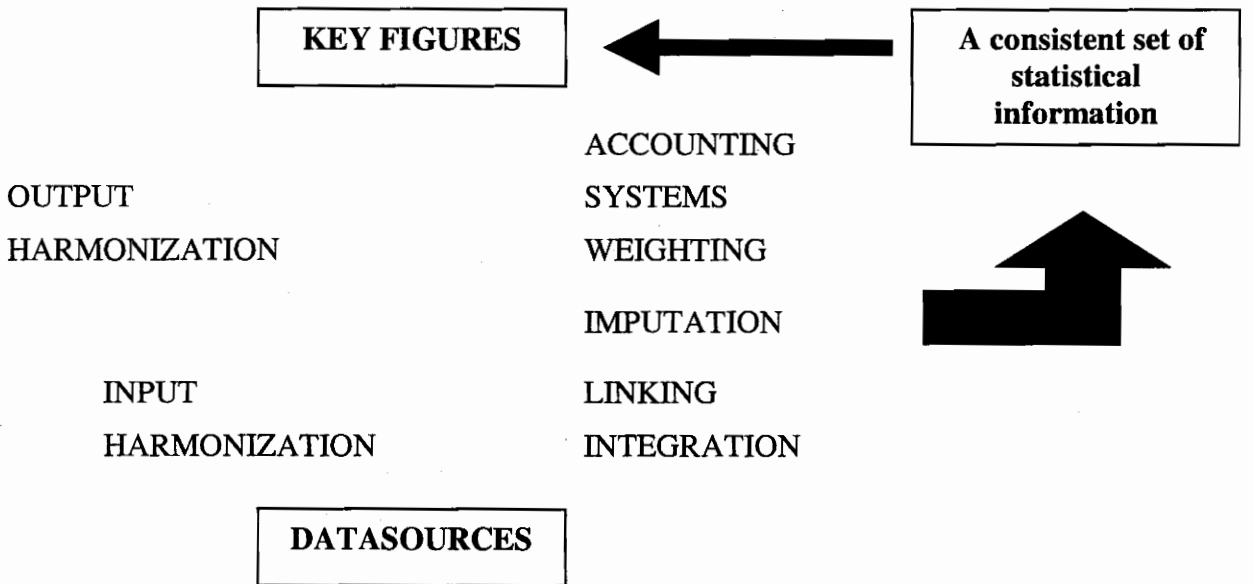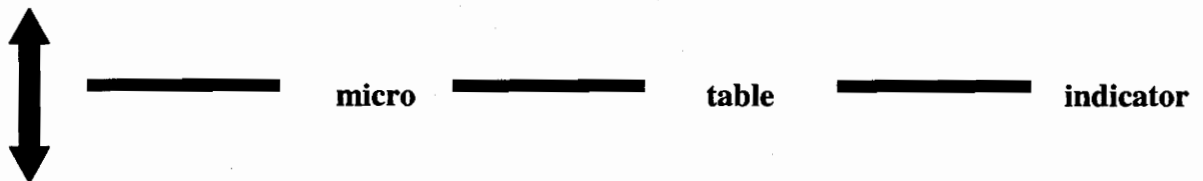
Integration (of sources)

legal
conceptual
methodology
(information technology)

_____ micro   ↕   _____ table   _____ indicator

Direct linking

(exist, access-legal,
access factual,
conceptual methodology
information technology)

_____ micro   _____ table ↕
                _____ micro   _____ indicator

(Mass imputation,
synthetic matching

conceptual
methodology
information technology)

_____ micro _____ table ↕ _____ indicator
_____ micro _____ table
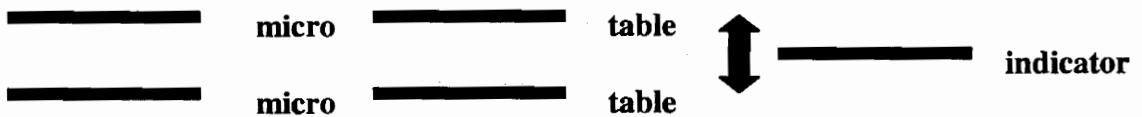
Repeated weighting (raking)
Accounting

Conceptual methodology
Information technology)

4. NATIONAL PRACTICES

Work program 2000-2001 NSI European Union (June '99)

Working on administrative sources and registers: D, E, F, L, NL, P, Fin, S, UK, (N)

Working on integration of surveys G, F, NL, P, Fin

Developing statistical systems D, L, NL, A, P

Impression of the use of registers and administrative sources in social statistics

High	D, Fin, S (N)
	NL
	F, L
	I, B
	E
Low	UK, Ire, P, El, G, A

An example: the Census 2000/2001

Other solution

Entirely register based

Denmark
Finland
Sweden
Norway
Iceland

Austria
Belgium
Luxembourg
Switzerland

Greece
Italy
Portugal
Spain

In transition

Traditional census
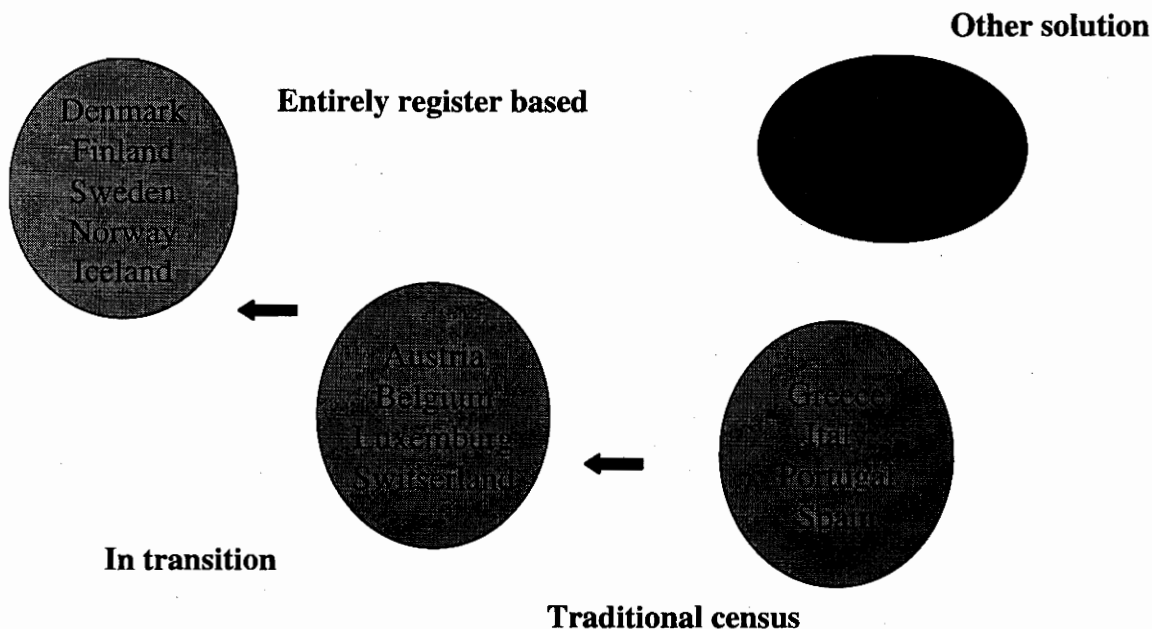
Expectations: the Netherlands

Data collection from persons & households

	PAPER	PRIM EDI	SEC. EDI
1987	76	4	20
1997	10	60	30
2007	5	35	60

5.   TO AN INTERNATIONAL REFERENCE DATA BASE ORIENTED STRUCTURE

The European challenge

User demand

priority high

DYNAMIC CONVERGENCE INDICATORS (5)

KEY SOCIAL INDICATORS (around 20)

MORE INDICATORS (around 150)

THEMATIC INFORMATION

SPECIFIC INFORMATION

DATASETS

priority low
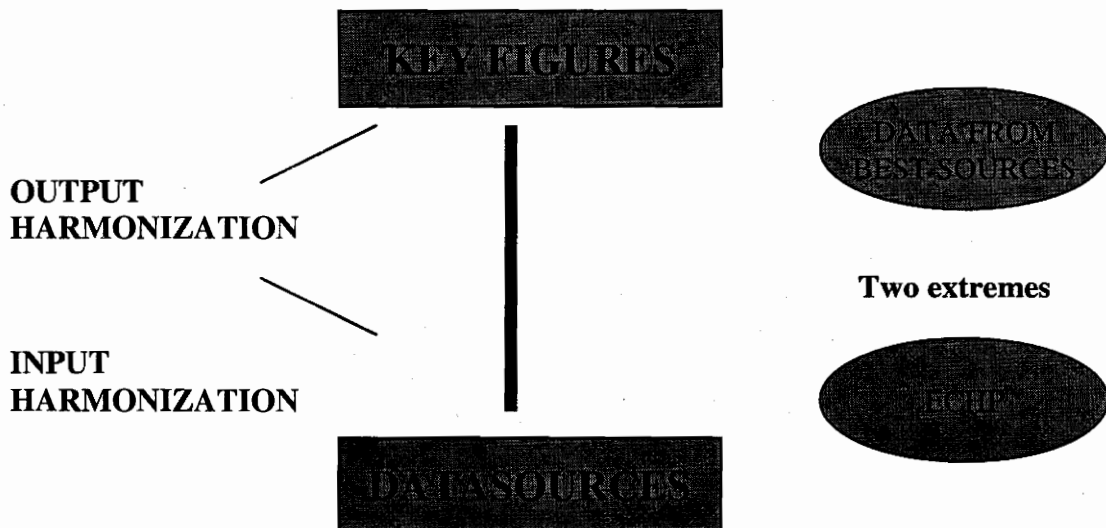
ECHP

- **Small sample size**
- **Not all Member States**
- **Cultural differences**
- **Expensive and complex**

LFS, HBS, other surveys

- **Not harmonized**
- **Variances differ**
- **Periodicity**
- **Cheap**

DATA FROM BEST SOURCES

concept

definition

operatio-
nalization

variable

categories/
classification

question
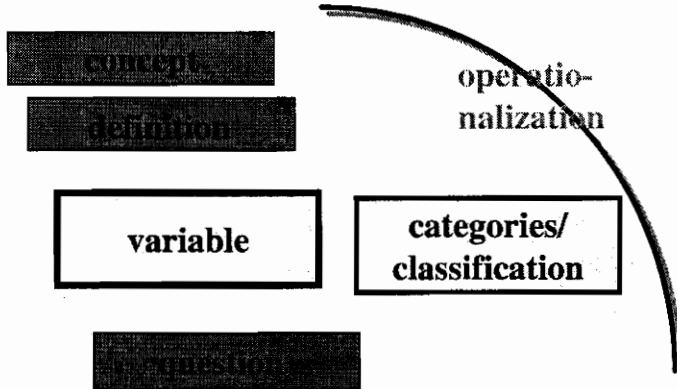
KEY SOCIAL INDICATORS

Are spread over the pyramid
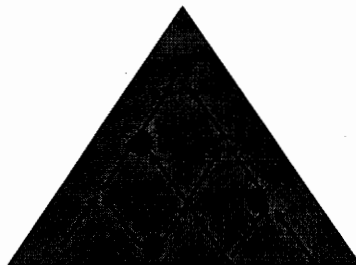
SOURCES

**The European System
of Social Statistics**
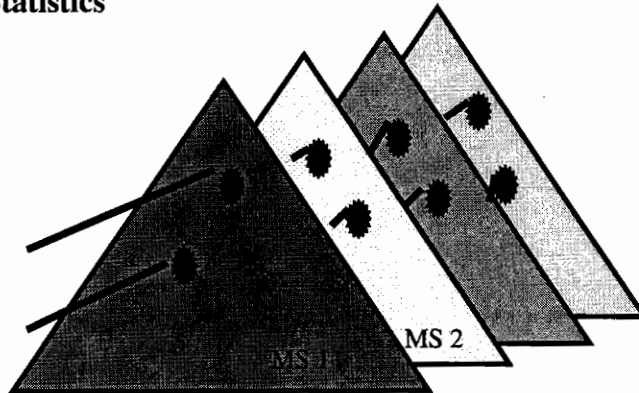
A SET OF COMPARABLE INDICATORS AS A MAIN OUTPUT

Some examples of key social indicators

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Some examples of core variables

Variable

Private household

Educational attainment

Hours worked

Labour status

Disposable income

Core tables

A standard set of tables each of them describing a key social indicator and its main disaggregation, allowing comparisons over regions and over time.

Joint DGV/Eurostat Report on the Social Situation

For each of the (16) Eurostat key social indicators two pages of statistical information

In Member States Social Reports

The standard set of tables based on the Eurostat key social indicators and the lay out of the fiches statistiques

- comparing Member State with other Member States

- comparative for regions or more specific categories in the Member States

Meta information

The recommended concepts and definitions and the used concepts and definitions in all sources for social statistics

- via inventory and electronic documentation

The measurement rules for the key social indicators

- a methodology handbook

Templates for best questions etc.

- Electronic documentation

Procedures for producing the tables

- a methodology handbook

-

NATIONAL COMBINED SOURCES
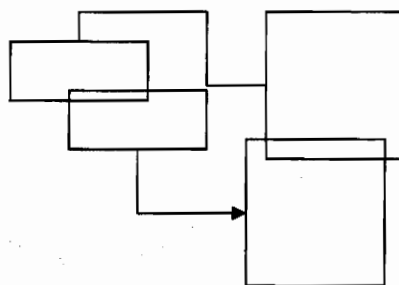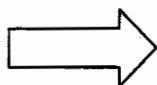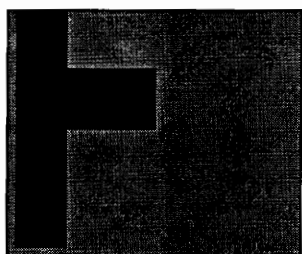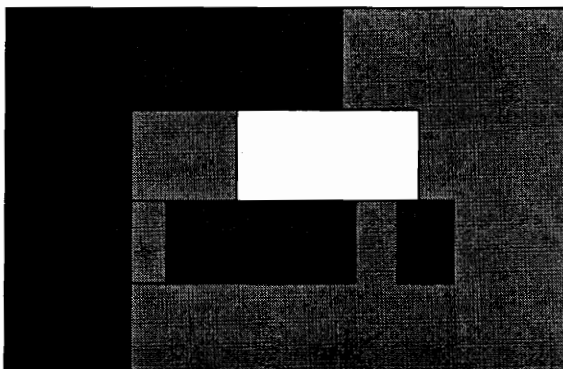
LINKED SOURCES   priorities   **RELATED TABLES**

repeated weighting

EUROPEAN COMBINED SOURCES
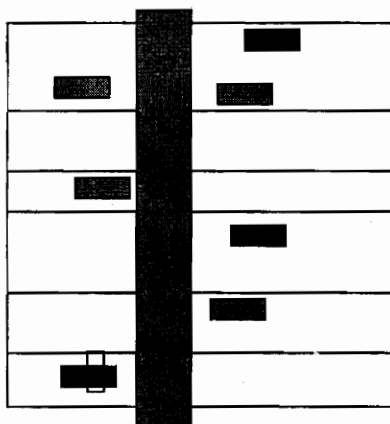
A set of policy

Relevant tables

(10.000?), stored

in a reference

data base
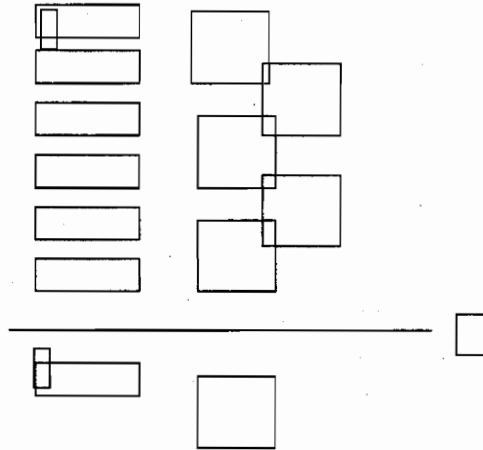
THE LINK TO A STATISTICAL WHAREHOUSE

A STRUCTURE OF DISSEMINATION OF INDICATOR INFORMATION

➢ LEAFLET
   KEY INDICATORS
➢ POCKETBOOK LIVING
   CONDITIONS
➢ REPORT ON THE SOCIAL
   SITUATION
➢ THEMATIC (DOMAIN)
   PUBLICATIONS
➢ TABLE ORIENTED
   SOURCE DATE
➢ MICRO DATA

MAIN WEB
PAGE
DOMAIN SPECIFIC
LAYER
STATISTICAL ANNEX
POD AND CD-ROM

NEW CRONOS

(STATISTICAL WHAREHOUSE)

Key information

Description of
society of main
social issues
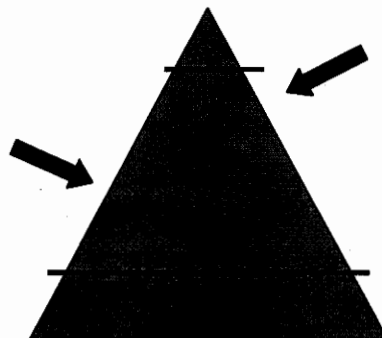
Description of
society (from the
perspective of a
relevant social
issue)

Basic sources

The European System of

Social Statistics
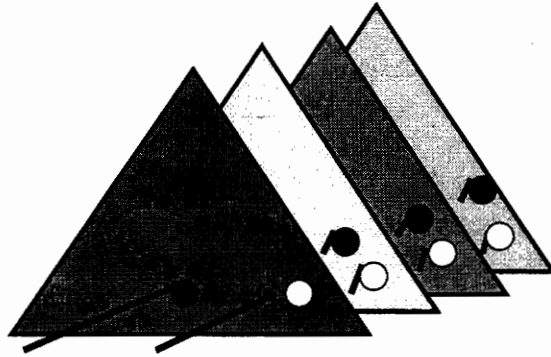
A SET OF CORE VARIABLES AS THE MAIN INPUT

Contraste entre Medidas Objetivas y Subjetivas de Pobreza

Carmen Ureña Ureña
INE-ESPAÑA

ÍNDICE

1.   INTRODUCCIÓN

En este trabajo pretendemos, en primer lugar ofrecer un breve repaso sobre los estudios sobre pobreza que se han realizado o se pueden realizar a partir de las fuentes estadísticas disponibles en España.

Para cada uno de los conceptos de pobreza, indicamos las fuentes que se pueden utilizar, analizando sus ventajas e inconvenientes. Finalmente, tomando como base los datos de las principales fuentes disponibles en el INE, estudiamos la consistencia entre pobreza subjetiva y objetiva, así como entre pobreza relativa y determinados aspectos de las condiciones de vida.

2. ESTUDIOS SOBRE POBREZA EN ESPAÑA

En el sistema español de información estadística se han venido produciendo desde los años cincuenta estudios esporádicos sobre distribución personal de la renta y del gasto. Pero ha sido en la última década cuando ha tenido lugar un incremento notorio de las necesidades estadísticas en este ámbito y muy especialmente para el análisis y seguimiento de las situaciones de desigualdad, pobreza y exclusión social.

El sistema de indicadores sociales del INE incluye entre los subcampos de interés uno dedicado a la observación y seguimiento de los fenómenos que afectan a grupos sociales especiales (ancianos, jóvenes, mujeres, población reclusa, discapacitados, etc.), mostrando en este contexto indicadores de pobreza y desigualdad. Para el seguimiento del fenómeno también se suelen realizar estudios basados en la distribución personal de la renta y el gasto. Así, se vienen presentando habitualmente las estadísticas de distribución del ingreso o el gasto por cuartiles, las curvas de Lorenz y diversos índices de desigualdad.

Concretamente, *La Panorámica Social* incluye capítulos sobre Población, Familia, Educación, Salud, Distribución de la renta, con diversas estadísticas de interés e indicadores para el estudio de la exclusión social, desigualdad y pobreza.

El INE ha publicado varios estudios monográficos sobre pobreza y desigualdad. Caben destacar los dos últimos:

- Estudio de los hogares menos favorecidos según la Encuesta de Presupuestos Familiares 1.990-91, elaborado por Jorge Saralegui (Subdirector General de Estadísticas Sociales).

- Desigualdad y Pobreza en España. Basado en las Encuestas de Presupuestos Familiares 1973-74, 1.980-81 y 1.990-91. Elaborado en colaboración con la Universidad Autónoma de Madrid y dirigido por la actual presidenta del INE, Pilar Martín-Guzmán Catedrática de Estadística en dicha Universidad.

En la actualidad se está elaborando, en colaboración con un equipo de investigación de la Universidad, una monografía sobre condiciones de vida de los hogares y las personas, basada en los datos del Panel de Hogares de la Unión Europea (años 1.994 y 1.995). Dicha monografía incluye un capítulo en el que se analizan las diferencias en cuanto al nivel de pobreza de las mujeres asalariadas, en función de la duración de su jornada habitual de trabajo.

3. NECESIDADES ACTUALES DE LOS USUARIOS

Actualmente, como principales demandantes de los datos elaborados por el INE en relación al tema que nos ocupa, hay que citar en un lugar destacado a los servicios gubernamentales encargados de las políticas activas dirigidas a corregir las desigualdades, con orientación hacia los colectivos o grupos sociales más desfavorecidos.

Otros usuarios muy interesados en los progresos de las estadísticas e indicadores de desigualdad y pobreza son los departamentos gubernamentales encargados de políticas sectoriales (educación, salud, vivienda, seguridad...), a los que hay que añadir los responsables de la política económica y fiscal de objetivos generales.

Al margen de la esfera del poder ejecutivo, existen instituciones públicas cuya demanda de información en este campo tiene un peso muy importantes. Caben destacar en este sentido el Congreso de los Diputados o el Consejo Económico y Social, en cuyo informe de 1.997 urge al INE a la producción de indicadores de pobreza con mayor frecuencia.

En los últimos años se observa un incremento significativo del papel de las organizaciones no gubernamentales (ONG) en la demanda de estas estadísticas. Estas organizaciones disponen de equipos de investigadores de la realidad social, que plantean fuertes exigencias de calidad y plazos a la estadística oficial. Algunas ONG desarrollan por su cuenta operaciones de captura de datos, aunque normalmente en ámbitos restringidos y más orientados a medir la pobreza extrema o la exclusión social.

Por otra parte, el mundo académico, principalmente el especializado en diversas ramas de las ciencias sociales y de la estadística, genera una fuerte demanda de información estadística, cuyos análisis utiliza en seminarios, tesis doctorales y publicaciones en revistas especializadas.

4. MEDIDAS DE POBREZA Y FUENTES ESTADÍSTICAS DISPONIBLES

A continuación presentamos un breve recorrido por las fuentes estadísticas asociadas a cada concepto de pobreza, según la orientación más o menos consensuada a nivel de la Unión Europea y con referencia a la situación española.

Pobreza objetiva: las publicaciones y estudios realizados hasta ahora en el INE, sintetizan las medidas objetivas de pobreza, basadas en variables directamente observables, principalmente el ingreso y el gasto, mediante las líneas de pobreza relativas.

Las líneas de pobreza absoluta son de interés limitado en España, no existiendo consenso ni demanda clara por parte de los usuarios, aunque algunos estudios presentan como línea de pobreza extrema la del 25% del gasto medio per cápita, bajo la cual se podría localizar la población española en pobreza absoluta.

Los estudios sobre medidas objetivas de pobreza basados en el cálculo de líneas de pobreza, utilizan como estadísticas de base las Encuestas de Presupuestos Familiares (EPF) y Panel de Hogares de la Unión Europea (PHOGUE),

Las Encuestas de Presupuestos Familiares han constituido el instrumento tradicional de estos estudios desde los años setenta, a través de una política de difusión del microdato por parte del INE. Fundamentalmente han sido **las Encuestas Básicas de Presupuestos Familiares (la última realizada en 1.990-91)** las que más han contribuido al desarrollo de la investigación sobre la medida de la pobreza y la desigualdad en su aproximación empírica y aplicada.

La Encuesta Continua de Presupuestos Familiares (ECPF), trimestral desde 1.985, ha sido utilizada, aunque con menos intensidad para estos estudios. Esta encuesta ha sido rediseñada a partir del tercer trimestre de 1.997 con un considerable aumento muestral, hasta unos 8.000 hogares trimestrales, desde los 3.200 de la muestra anterior, lo cual permitirá algunas explotaciones regionales.

En general, estas encuestas ofrecen una gran riqueza de información (recogen datos sobre variables geográficas, demográficas y sociodemográficas de los hogares y de cada uno de sus miembros; sobre indicadores monetarios del nivel de vida; datos sobre la vivienda en que reside el hogar, y sobre la

disposición y disfrute de determinados bienes, servicios y equipamiento del hogar; percepciones subjetivas del hogar tanto en la actualidad como en épocas anteriores).

La unidad de análisis es el hogar, por entender que las personas que lo integran disfrutan de un nivel de vida similar.

No resulta fácil la elección de un indicador monetario de bienestar, y en principio, el más aceptado para la medición del nivel de vida seria el total de ingresos anuales del hogar, aunque sería más apropiado utilizar una combinación de renta y riqueza.

Por otra parte, la desigualdad, la pobreza y en general, el nivel de vida tienden a ser fenómenos más estables que la renta anual, por lo que el concepto de renta permanente se ajusta más en general a los objetivos de nuestro estudio, pero el no disponer de información sobre renta del hogar en amplios periodos obliga a buscar otras alternativas.

Todavía existe en la actualidad en España una corriente de investigadores que consideran el gasto como indicador monetario de aproximación a la renta permanente, aunque esta alternativa no queda exenta de problemas, ya que los gastos de un hogar están influidos por el entorno y dependen del momento del ciclo vital.

El Panel de Hogares de la Unión Europea, es una encuesta de rentas y condiciones de vida realizada en España por el INE y armonizada a nivel europeo.

Esta encuesta va más allá de las tradicionales encuestas transversales, ya que no sólo describe la situación de la población en un momento determinado, sino que además permite obtener información longitudinal, es decir, referida a los mismos hogares y personas en diferentes momentos del tiempo.

Esto significa que los hogares elegidos en primera instancia son mantenidos en la muestra en los años siguientes, permitiendo la entrada de nuevos miembros y siguiendo a los miembros que han abandonado el hogar o al hogar en su conjunto siempre que residan en hogares privados o colectivos dentro de la Unión Europea.

La duración prevista del PHOGUE es de nueve ciclos, habiéndose iniciado en 1.994, sobre unas 24.000 personas en el caso español, llevándose a cabo en la actualidad los trabajos de campo del sexto ciclo.

Uno de los principales objetivos de esta encuesta es el estudio de la pobreza y desigualdad de rentas y condiciones de vida dentro de cada país y entre países. Las primeras publicaciones aparecidas hasta ahora, tanto las producidas por el INE, como las de Eurostat presentan un volumen considerable de tablas sobre pobreza y desigualdad.

Tanto el PHOGUE como las EPF son encuestas dirigidas a hogares que residen en viviendas familiares, quedando excluidos por tanto de la investigación los *sin techo* y las personas que residen en hogares colectivos. No obstante, el PHOGUE al seguir a las personas que continúan residiendo en hogares privados o colectivos dentro de la Unión Europea, va a poder utilizarse en el futuro, para estudiar la situación de las personas que se trasladen a hogares colectivos.

El PHOGUE y las Encuestas Continuas de Presupuestos Familiares permiten contrastar los ciclos económicos con la evolución de la pobreza, además el PHOGUE, al seguir a las personas a lo largo del tiempo, permitirá estudiar la pobreza estructural, la coyuntural y la permanencia en la pobreza. Por otra parte, al ser el PHOGUE fundamentalmente una encuesta de rentas, presta más atención a las mismas que las EPF, para las que la variable renta se plantea como variable de clasificación.

Como desventaja del PHOGUE frente a las EPF cabe citar que sólo proporciona información sobre renta monetaria, no investigando la componente no monetaria.

Dado el consenso actual sobre la necesidad del enfoque multidimensional para los estudios de pobreza, existe además un amplio conjunto de fuentes estadísticas que pueden ser utilizadas, y quizás lo

deberían ser con mayor intensidad en el futuro. Entre estas fuentes podemos citar la Encuesta de Población Activa, la Encuesta de Discapacidades, Deficiencias y Estado de Salud (actualmente en explotación la de 1.999 que contiene información sobre ingresos para la clasificación de unidades).

Otra posible fuente de información es el impuesto sobre la renta de las personas físicas (IRPF), que recoge para las personas que están sujetas a declaración, información sobre las rentas percibidas, por lo que la cobertura de la población no es total (no se registran las unidades familiares que perciben menos de una determinada cantidad).

Estas fuentes constituyen instrumentos de apoyo para la elaboración de informes y estudios cualitativos, especialmente, para la caracterización del riesgo de entrada y permanencia en situaciones sociales desfavorables.

Pobreza subjetiva: Un estudio de pobreza no debe centrarse exclusivamente en detectar a los hogares o personas menos favorecidos desde el punto de vista de los ingresos que perciben o los gastos que efectúan, sino que debe completarse con información sobre cómo perciben los propios hogares o personas su situación.

Las líneas de pobreza subjetivas se basan en la percepción que los propios hogares o personas tienen de sus necesidades. Utilizan el ingreso como indicador monetario del nivel de vida, y tienen la ventaja frente a las objetivas de no requerir el uso de escalas de equivalencia (el propio hogar, cuando proporciona información tiene en cuenta el tamaño).

A propuesta de Eurostat, en la Encuesta de Prepuestos Familiares 1.990-91 se incluyó un módulo de pobreza subjetiva, que permitió el cálculo de las líneas de KAPTEYN, LEYDEN y DELEECK, así como estudiar los hogares que se sentían pobres.

En la publicación *Estudio sobre Desigualdad y Pobreza en España* mencionada anteriormente así como en la ponencia *Fuentes Estadísticas para el Estudio de la Pobreza* presentada por Paloma Seoane en el seminario sobre pobreza del grupo Río celebrado en Santiago de Chile en 1.997, se tratan en detalle los aspectos metodológicos asociados a estos conceptos. En el apartado 5 del presente documento comentamos brevemente algunos de los resultados obtenidos en ambos estudios.

Continuando esta línea de trabajo de análisis de la pobreza subjetiva como complemento al estudio de la pobreza objetiva, las encuestas actuales del INE citadas como fuentes de las estadísticas de pobreza, permiten aproximarse al seguimiento de la pobreza subjetiva en España.

Así, en la Encuesta Continua de Presupuestos Familiares se formulan las siguientes preguntas relacionadas con la percepción subjetiva del hogar:

En relación con el total de ingresos netos mensuales que percibe regularmente su hogar en la actualidad, ¿cómo suele llegar a fin de mes?.

- Con mucha dificultad.
- Con dificultad.
- Con cierta dificultad.
- Con cierta facilidad.
- Con facilidad.
- Con mucha facilidad.

Considerando los ingresos y gastos del hogar, ¿ha podido dedicar el hogar algún dinero sobrante al ahorro durante el último trimestre?.

- Si.

- No, o muy poco.

¿Considera que para realizar compras importantes, el momento actual es adecuado? (No considere la compra de vivienda).

- Sí. Es un momento adecuado.

- El momento actual no es adecuado pero tampoco malo.

- Es un momento inadecuado.

En los cuestionarios del PHOGUE se realizan las siguientes preguntas que permiten construir las líneas de KAPTEYN y de DELEECK, y comparar la situación actual del hogar con respecto a la del año anterior:

En su opinión ¿cuáles son los ingresos mensuales netos que como mínimo se necesitarían para que un hogar como el suyo llegue a fin de mes?

- Ingresos mensuales netos.

En relación con el total de ingresos netos mensuales que percibe regularmente su hogar en la actualidad ¿cómo suele llegar a fin de mes?

- Con mucha dificultad.

- Con dificultad.

- Con cierta dificultad.

- Con cierta facilidad.

- Con facilidad.

- Con mucha facilidad.

Comparando la situación económica actual de su hogar con la de hace un año, usted diría que:

- Ha mejorado mucho.

- Ha mejorado poco.

- Ha permanecido igual.

- Ha empeorado un poco.

- Ha empeorado mucho.

También se formulan en el PHOGUE entre otras, las siguientes preguntas en las que interviene la percepción del interesado acerca de determinados aspectos sobre la situación económica, el bienestar y la calidad de vida.

A NIVEL DE HOGAR:

¿Tiene su vivienda alguno de los problemas e inconvenientes siguientes?

- Falta de espacio.

- Ruidos producidos por los vecinos.

- Otros ruidos procedentes del exterior (tráfico, fábricas colindantes, etc.).

- Luz natural insuficiente en alguna o todas las habitaciones.

- Falta de instalación adecuada de calefacción.

- Goteras.

- Humedades.

- Podredumbre en suelos o en ventanas de madera.

- Contaminación, suciedad u otros problemas medioambientales producidos por la industria o el tráfico.

- Delincuencia o vandalismo en la zona.

Para cada uno de los bienes que se relacionan, indique si el hogar o alguno de sus miembros dispone de ellos, independientemente de que sean de su propiedad, alquilados o de alguna manera puestos a su disposición. Si no dispone de alguno de los bienes indique el motivo.

- Automóvil o furgoneta (para uso privado).

- Televisor en color.

- Vídeo.

- Microondas.

- Ordenador personal.

- Lavavajillas.

- Teléfono.

- Vivienda secundaria.

Si los miembros adultos de su hogar o al menos alguno de ellos lo deseara, ¿podría su hogar permitirse cada de las situaciones que se indican? (Aunque no las desee, responda SI siempre que pueda permitírselas).

- Una calefacción adecuada para su vivienda.

- Vacaciones pagadas fuera de casa, al menos una semana al año.

- Renovar parte del mobiliario.

- Comprar prendas de vestir nuevas.

- Hace una comida de carne, pollo o pescado, al menos cada dos días.

- Invitar a amigos o familiares a una copa o a una comida en el hogar, al menos una vez al mes.

Considerando los ingresos y gastos del hogar, ¿dedica habitualmente el hogar algún dinero al ahorro o a la adquisición de vivienda principal o secundaria? (Entienda por *habitualmente* seis o más meses al año)

- Si

- NO, o muy poco.

A NIVEL INDIVIDUAL:

¿Cuál es el grado de satisfacción que le proporciona su trabajo actual en relación a los siguientes conceptos?. (Evalúe su grado de satisfacción en una escala que varía entre *no satisfecho en absoluto* -1- a *plenamente satisfecho* -6-).

- Ingresos.

- Estabilidad en el trabajo.

- Tipo de trabajo.

- Número de horas de trabajo.

- Turno laboral (turno de día, de noche, turno variable, etc.).

- Condiciones ambientales (aire, luz, espacio, temperatura) o personales.

- Distancia y comunicaciones al lugar de trabajo.

- **¿Con qué frecuencia habla usted con alguno de sus vecinos?**

- La mayoría de los días.

- Una o dos veces a la semana.

- Una o dos veces al mes.

- Menos de una vez al mes.

- Nunca.

¿Con qué frecuencia se ve con amigos o parientes (que no residan con usted), bien sea en su casa o fuera de ella?

- La mayoría de los días

- Una o dos veces por semana.

- Una o dos veces al mes.

- Menos de una vez al mes.

- Nunca.

¿Cuál es su grado de satisfacción en relación a su situación actual, en cada una de las siguientes áreas? Utilice una escala de graduación de 1 a 6, significando la puntuación "1" que está muy insatisfecho, y la "6", que está plenamente satisfecho).

- Su trabajo o actividad principal.

- Su situación económica.

- Las condiciones de su vivienda.

- La cantidad de tiempo que puede dedicar al ocio.

5. CONSISTENCIA ENTRE POBREZA OBJETIVA Y SUBJETIVA. POBREZA RELATIVA Y CONDICIONES DE VIDA

A partir de las tres fuentes principales de datos disponibles en el INE, vamos a establecer comparaciones entre pobreza subjetiva y objetiva. Con los datos del PHOGUE estudiaremos la consistencia entre pobreza relativa y determinados aspectos del nivel de vida.

Comenzando por la EPF 90-91, y haciendo referencia al trabajo presentado por Paloma Seoane en 1.997 en Santiago de Chile, en la tabla 1 se ofrece una descripción del grado de consistencia entre pobreza objetiva (línea del 40% del ingreso medio per cápita y pobreza subjetiva según Leyden). En dicho trabajo se concluía que según Leyden el 4,9% de hogares eran pobres mientras que con la línea del 40% del ingreso per cápita, eran pobres el 8,7% de los hogares.

TABLA 1
CONSISTENCIA ENTRE POBREZA OBJETIVA Y SUBJETIVA
(EPF 90-91)

Pobres Leyden	Pobres objetivos 40% ingreso		
	No pobres	Pobres	Totales
No pobres	10.151.085 94,4% 98,4% 89,8%	598.135 5,6% 60,7% 5,3%	10.794.220 95,1%
Pobres	161.922 29,5% 1,6% 1,4%	387.367 70,5% 39,3% 3,4%	549.289 4,9%
Totales	10.313.007 91,3%	985.503 8,7%	11.928.509 100%

Nota: Las cifras que aparecen en los cuadros, siempre referidas a la unidad hogar son por este orden:
1. Frecuencias poblacionales estimadas
2. Porcentajes sobre pobreza Leyden
3. Porcentajes sobre pobreza objetiva
4. Porcentajes sobre población estimada
Fuente: elaborado por Paloma Seoane a partir de los datos de la EPF 1990-91

Por otra parte se observaron diferencias al comparar porcentajes de pobres subjetivos según Leyden y Kapteyn con respecto a la percepción de la pobreza de los propios hogares.

El 3,9% de los hogares se consideraban pobres, mientras que según Leyden y Kapteyn estos porcentajes eran respectivamente de 4,9% y 22,2%.

Comparando el porcentaje objetivo de hogares pobres según las líneas del 40, 50 y 60% del gasto medio equivalente con la clasificación subjetiva de la pobreza se obtuvo que el porcentaje de hogares que se sentían pobres era significativamente menor al de pobres objetivos.

Como variable indicativa de la percepción subjetiva del hogar de su situación económica podemos considerar el ahorro. Así, analizando los resultados de la nueva EPF, en la tabla 2 observamos que el porcentaje de hogares con posibilidades de ahorrar aumenta con el nivel de ingresos.

No obstante, entre los hogares con bajos ingresos hay algunos que pueden ahorrar, y por el contrario, el 23,7% de los hogares en el tramo superior de ingresos manifiesta que no puede ahorrar.

TABLA 2

**DISTRIBUCIÓN DE HOGARES EN LOS DISTINTOS TRAMOS DE INGRESOS DEL HOGAR,
SEGÚN LA POSIBILIDAD DE AHORRAR**

Porcentajes horizontales (E.C.P.F.) Año 1998[1]

Tramos de ingresos	Total	Sí	No	No consta
Porcentajes horizontales				
TOTAL	100.00	26.95	69.07	3.99
Hasta 65.000 ptas	100.00	7.06	92.11	0.82
De 65.001 a 130.000 ptas	100.00	14.78	84.14	1.07
De 130.001 a 195.000 ptas	100.00	22.99	76.07	0.94
De 195.001 a 260.000 ptas	100.00	32.39	66.17	1.44
De 260.001 a 325.000 ptas	100.00	45.41	52.37	2.23
De 325.001 a 390.000 ptas	100.00	50.53	48.08	1.39
De 390.001 a 650.000 ptas	100.00	69.50	27.57	2.94
Más de 650.000 ptas	100.00	68.60	23.73	7.67

1. Datos referidos al segundo trimestre del año.

Otra variable indicativa de la apreciación subjetiva por parte de los hogares de su situación económica es la consideración de si el momento actual es adecuado para realizar compras importantes.

Como puede apreciarse en la tabla 3, el porcentaje de hogares que se muestran optimistas aumenta a medida que asciende su nivel de ingresos, aunque hay un 2,7% de los hogares más desfavorecidos económicamente que consideran el momento actual adecuado para realizar compras importantes.

Por el contrario, el 13,4% de los hogares situados en el tramo superior de ingresos considera el momento actual inadecuado.

TABLA 3

**DISTRIBUCIÓN DE HOGARES EN LOS DISTINTOS TRAMOS DE INGRESOS DEL HOGAR, SEGÚN LA
CONSIDERACIÓN DE SI EL MOMENTO ACTUAL ES ADECUADO PARA REALIZAR COMPRAS IMPORTANTES**

Porcentajes horizontales (E.C.P.F.) Año 1998[1]

Tramos de ingresos	Total	Es un momento adecuado	No es adecuado pero tampoco malo	Es un momento inadecuado	No consta
Porcentajes horizontales					
TOTAL	100.00	13.58	35.08	47.31	4.03
Hasta 65.000 ptas	100.00	2.71	20.81	75.68	0.80
De 65.001 a 130.000 ptas	100.00	5.78	30.14	62.86	1.22
De 130.001 a 195.000 ptas	100.00	10.23	37.75	50.98	1.03
De 195.001 a 260.000 ptas	100.00	16.20	41.15	41.27	1.37
De 260.001 a 325.000 ptas	100.00	24.49	41.11	32.95	1.45
De 325.001 a 390.000 ptas	100.00	31.83	42.61	23.68	1.88
De 390.001 a 650.000 ptas	100.00	40.22	37.72	19.13	2.94
Más de 650.000 ptas	100.00	52.67	28.57	13.44	5.33

1. Datos referidos al segundo trimestre del año.

La tabla 4 permite analizar el grado de dificultad de los hogares para llegar a fin de mes según su nivel de ingresos, como era de esperar los hogares con menores ingresos son los que manifiestan mayores dificultades para llegar a fin de mes, aunque no todos los pobres manifiestan dificultades ni todos los ricos llegan a fin de mes con facilidad.

TABLA 4
DISTRIBUCIÓN DE HOGARES EN LOS DISTINTOS TRAMOS DE INGRESOS DEL HOGAR, SEGÚN EL GRADO DE DIFICULTAD PARA LLEGAR A FIN DE MES
Porcentajes horizontales (E.C.P.F.) Año 1998[1]

Tramos de ingresos	Total	Con mucha dificultad	Con dificultad	Con cierta dificultad
Porcentajes horizontales				
TOTAL	100.00	9.85	15.55	28.25
Hasta 65.000 ptas	100.00	37.39	31.62	21.21
De 65.001 a 130.000 ptas	100.00	16.80	23.29	34.58
De 130.001 a 195.000 ptas	100.00	7.82	17.40	36.76
De 195.001 a 260.000 ptas	100.00	3.50	9.71	30.38
De 260.001 a 325.000 ptas	100.00	2.12	7.50	19.78
De 325.001 a 390.000 ptas	100.00	0.89	4.11	15.54
De 390.001 a 650.000 ptas	100.00	1.85	3.02	8.96
Más de 650.000 ptas	100.00	4.25	0.00	8.09

1.   Datos referidos al segundo trimestre de 1998.

TABLA 4A
DISTRIBUCIÓN DE HOGARES EN LOS DISTINTOS TRAMOS DE INGRESOS DEL HOGAR, SEGÚN EL GRADO DE DIFICULTAD PARA LLEGAR A FIN DE MES (CONTINUACIÓN)
Porcentajes horizontales (E.C.P.F.) Año 1998[1]

Tramos de ingresos	Con cierta Facilidad	Con facilidad	Con mucha facilidad	No contesta
Porcentajes horizontales				
TOTAL	28.40	12.80	0.97	4.18
Hasta 65.000 ptas	7.06	2.29	0.12	0.31
De 65.001 a 130.000 ptas	19.55	4.65	0.21	0.92
De 130.001 a 195.000 ptas	29.30	7.42	0.16	1.13
De 195.001 a 260.000 ptas	40.14	15.18	0.77	0.32
De 260.001 a 325.000 ptas	43.26	25.52	1.39	0.43
De 325.001 a 390.000 ptas	46.59	31.52	1.26	0.09
De 390.001 a 650.000 ptas	29.59	46.44	7.99	2.15
Más de 650.000 ptas	22.20	46.68	16.17	2.62

1. Datos referidos al segundo trimestre de 1998.

Del estudio conjunto de las tablas 2 a 4 podemos concluir que aunque sí bien es cierto que en general los hogares con menores ingresos son los que perciben en mayor medida dificultades y problemas de índole económico, no siempre la situación objetiva de pobreza indica sentimiento de considerarse desfavorecido, es decir, no existe una consistencia absoluta entre medidas objetivas y subjetivas de pobreza.

PHOGUE: POBREZA RELATIVA, SUBJETIVA Y CONDICIONES DE VIDA

Centrándonos en los datos proporcionados por el PHOGUE (año 1.995), si analizamos los hogares que sufren determinados problemas en sus viviendas según su posición relativa de pobres o no pobres, en la tabla 5 puede apreciarse que no todos los hogares pobres sufren problemas en sus viviendas, ya que por ejemplo sólo al 25,5% de ellos les falta espacio frente al 22,2% en el conjunto nacional.

Aparentemente los hogares pobres están mejor situados que los no pobres con respecto a problemas de ruidos exteriores, contaminación o problemas medioambientales y luz natural insuficiente. Sin embargo, sufren en mayor proporción que los no pobres los problemas de goteras, humedades y podredumbre en suelos o ventanas de madera. El problema de la delincuencia y vandalismo en la zona afecta en la misma medida a pobres y no pobres.

Esta casuística, sin duda, está relacionada con la alta incidencia de la pobreza objetiva entre los hogares rurales, que no sufren las tensiones sociales y medioambientales del mundo urbano.

TABLA 5
HOGARES QUE SUFREN DETERMINADOS PROBLEMAS SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	1	2	3	4	5	6	7	8	9	10
Todos los hogares	22.2	30.6	17.7	1.1	10.3	18.9	7.5	19.6	23.8	33.0
Hogares situados por debajo del 50% de la media	25.5	28.2	15.9	0.4	16.3	25.1	9.8	15.7	23.6	31.5
Hogares situados por encima del 50% de la media	21.5	31.2	18.0	1.3	9.0	17.5	7.1	20.5	23.8	33.3

1. Falta de espacio
2. Ruidos exteriores
3. Luz natural insuficiente
4. Falta de instalación adecuada de calefacción
5. Goteras
6. Humedades
7. Podredumbre en suelos o ventanas de madera
8. Contaminación o problemas medioambientales
9. Delincuencia o vandalismo en la zona
10. Ningún problema

La tabla 6 nos ofrece información del motivo por el que los hogares, clasificados en pobres o no pobres, no poseen determinados bienes de equipamiento. Para cada bien de equipamiento se consideran dos motivos: no podérselo permitir económicamente y otros motivos no económicos.

TABLA 6
HOGARES QUE NO POSEEN DETERMINADOS BIENES DE EQUIPAMIENTO SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	Automóvil		Video		Microondas	
	No puede permitirselo	Otros motivos	No puede permitirselo	Otros motivos	No puede permitirselo	Otros motivos
Todos los hogares	47.0	53.0	41.4	58.6	37.2	62.8
Hogares situados por debajo del 50% de la media	66.2	33.8	56.7	43.3	59.0	41.0
Hogares situados por encima del 50% de la media	40.7	59.3	36.6	63.4	31.2	68.8

TABLA 6A

HOGARES QUE NO POSEEN DETERMINADOS BIENES DE EQUIPAMIENTO SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO) (CONTINUACIÓN)

(PHOGUE 1995)

	Lavavajillas		Teléfono		Vivienda secundaria	
	No puede permitírselo	Otros motivos	No puede permitírselo	Otros motivos	No puede permitírselo	Otros motivos
Todos los hogares	39.8	60.2	64.3	35.7	79.4	20.6
Hogares situados por debajo del 50% de la media	61.2	38.8	80.7	19.3	87.9	12.1
Hogares situados por encima del 50% de la media	34.3	65.7	55.7	44.3	77.3	22.7

Del análisis de estos datos se desprende que no siempre en los hogares pobres el motivo para no poseer un bien es el económico, y por el contrario, porcentajes significativos de hogares no pobres no poseen determinados bienes por no podérselo permitir económicamente.

La tabla 7 nos proporciona información sobre el porcentaje de hogares que no pueden permitirse diversos gastos, observándose diferencias considerables entre hogares pobres y no pobres. No obstante, estos datos ponen de manifiesto que algunos hogares pobres relativos sí pueden permitirse calefacción adecuada (17,7%), vacaciones al menos una semana (17,7%) y renovar parte del mobiliario (17,6%), y la mayoría de ellos pueden comprar prendas de vestir, comer carne o pescado al menos cada dos días e invitar a amigos en casa.

TABLA 7

HOGARES QUE NO PUEDEN PERMITIRSE DIVERSOS GASTOS SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)

(PHOGUE 1995)

	1	2	3	4	5	6
Todos los hogares	58.1	50.0	58.8	9.3	2.4	13.4
Hogares situados por debajo del 50% de la media	82.3	82.3	82.4	21.0	6.4	27.5
Hogares situados por encima del 50% de la media	53.0	43.2	53.8	6.9	1.5	10.4

1. Calefacción adecuada en la vivienda
2. Vacaciones al menos una semana al aaño
3. Renovar parte del mobiliario
4. Comprar prendas de vestir nuevas
5. Comer carne o pescado al menos cada dos días
6. Invitar a amigos al menos una vez al mes

Por el contrario, son considerables los porcentajes de hogares no pobres que no pueden permitirse calefacción adecuada, vacaciones o renovar parte del mobiliario; y algunos de ellos no pueden comprar prendas de vestir nuevas, comer carne o pescado al menos cada dos días o invitar a amigos en casa.

La tabla 8 clasifica a los hogares según las dificultades que tienen para llegar a fin de mes. Como puede observarse casi el 90% de los hogares pobres objetivos declaran llegar a fin de mes con algún grado de dificultad, y el 10,6% llega con alguna facilidad. En los hogares no pobres sólo el 39% manifiesta facilidad para llegar a fin de mes y el 61% algún grado de dificultad.

TABLA 8
HOGARES CON DIFICULTAD PARA LLEGAR A FIN DE MES SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	Con mucha dificultad	Con dificultad	Con cierta dificultad	Con cierta facilidad	Con facilidad	Con mucha facilidad	No consta
Todos los hogares	15.3	17.6	32.8	23.7	9.3	1.1	0.2
Hogares situados por debajo del 50% de la media	36.1	25.5	27.9	8.8	1.6	0.2	---
Hogares situados por encima del 50% de la media	10.9	16.0	33.7	26.9	11.0	1.3	0.2

Estos resultados indican que no existe una relación perfecta entre las escalas de medida de la pobreza objetiva y subjetiva, ya que no todos los pobres aprecian tener dificultades y más de la mitad de los no pobres llegan a fin de mes con alguna dificultad.

Si ahora restringimos nuestro análisis a la población ocupada 15 ó más horas a la semana y consideramos el grado de satisfacción en el trabajo en relación con los ingresos, la tabla 9 parece indicarnos que los ocupados de hogares pobres son los más insatisfechos con los ingresos que les proporciona su trabajo, aunque no todos están insatisfechos ya que un 17,4% manifiesta algún grado de satisfacción. Por otra parte, los ocupados no pobres son los más satisfechos, aunque el 55% manifiesta algún grado de insatisfacción.

TABLA 9
POBLACIÓN OCUPADA SEGÚN GRADO DE SATISFACCIÓN EN EL TRABAJO CON INGRESO SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	No satisf. en absoluto	Mínimamente satisfecho	Poco satisfecho	Bastante satisfecho	Muy satisfecho	Plenamente satisfecho	No consta
Todos los ocupados	12.9	17.8	26.6	23.8	12.6	3.8	2.7
Personas situadas por debajo del 50% de la media	29.9	25.2	23.5	11.5	3.8	2.1	4.0
Personas situadas por encima del 50% de la media	11.1	17.0	26.9	25.0	13.9	3.9	2.6

La tabla 10 clasifica a la población adulta según la frecuencia con que tienen contactos con vecinos, según su hogar sea o no pobre.

TABLA 10
ADULTOS SEGÚN FRECUENCIA CON QUE TIENEN CONTACTOS CON VECINOS SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	La mayoría de los días	Una o dos veces a la semana	Una o dos veces al mes	Menos de una vez al mes	Nunca	No consta
Todos los adultos	67.3	20.2	5.4	2.7	2.3	2.1
Personas situadas por debajo del 50% de la media	73.9	13.0	3.8	1.8	2.2	3.0
Personas situadas por encima del 50% de la media	66.0	21.3	5.7	2.9	2.2	2.0

Son precisamente las personas cuyos hogares son pobres objetivos las que más frecuentemente se relacionan con sus vecinos, y por el contrario en los no pobres es donde encontramos el menor porcentaje de personas que se relacionan a diario.

A la misma conclusión llegamos si estudiamos la frecuencia de los contactos con amigos o parientes (tabla 11).

TABLA 11
ADULTOS SEGÚN FRECUENCIA CON QUE TIENEN CONTACTOS CON AMIGOS O PARIENTES SEGÚN SITUACIÓN CON RESPECTO AL UMBRAL DE POBREZA (50% DE LA MEDIA DEL INGRESO POR UNIDAD DE CONSUMO)
(PHOGUE 1995)

	La mayoría de los días	Una o dos veces a la semana	Una o dos veces al mes	Menos de una vez al mes	Nunca	No consta
Todos los adultos	68.7	21.2	5.6	1.9	0.5	2.1
Personas situadas por debajo del 50% de la media	73.5	16.3	4.7	1.8	0.8	3.0
Personas situadas por encima del 50% de la media	67.7	22.3	5.8	2.0	0.4	1.9

Conclusiones: A la vista de los resultados presentados en este documento podemos concluir que no existe una relación perfecta entre las medidas de pobreza basadas en líneas relativas y la opinión subjetiva del informante sobre determinados aspectos relacionados con su nivel de vida.

Aunque si bien es cierto que los pobres relativos se pueden manifestar desfavorecidos en mayor medida que los no pobres, dentro de los considerados objetivamente pobres, hay algunos que no expresan dicho sentimiento. Y viceversa, no todos los clasificados objetivamente como no pobres consideran que su situación es favorable.

Estas conclusiones vienen a confirmar recientes estudios europeos (principalmente a partir de la disponibilidad de los ficheros microdato del PHOGUE sobre las distintas estructuras sociales asociadas a la pobreza objetiva y la pobreza subjetiva, y, dentro de la primera, la pobreza de renta o gasto respecto a la pobreza carencial, (esta última identifica a los hogares desfavorecidos a partir de la carencia de equipamiento del hogar, precariedad en los servicios de vivienda, otros servicios públicos...).

Todo ello nos conduce de nuevo a la necesidad del enfoque multidimensional de los fenómenos de pobreza y exclusión, debiendo manejarse con precaución las distribuciones marginales de estadísticas de pobreza.

Poverty Comparison in some European Countries

MADIOR FALL

INSEE - FRANCE

Two Groups of countries:

- Western : Belgium, France, Portugal, Spain, Italy, United Kingdom
- Eastern : Poland, Slovakia, Albania, Romania

Challenge: measuring three indicators of poverty for each country

1. Monetary poverty
2. Living conditions
3. Subjective poverty

Some general problems of defining poverty concept:

- Absolute or relative
- Limits of our sources
- Problem of homeless
- Etc...
- Historical dimension

Technical issues to resolve for comparison:

- Choice of equivalent scales for each country according to consumption structure (importance of budget coefficient for food, leisure....)
- Take into account difference between price indexes by using PPP
- Choice of items included in poverty score according to economic and social situation of each country
- Defining comparable thresholds on every kind of poverty measurement (take care for interpretation of results for different countries)
- Relation between poverty and unemployment with introduction of cohort approach

Data:

- First group of countries : ECHP (European Community Households Panel)
- Second group: surveys on living conditions closer to ECHP (surveys done with INSEE's collaboration)

Some incomplete results:

Inequality Indexes

INCOME PER UNIT CONSUMPTION CORRECTED BY PURCHASING PARITIES POWER

	Gini	Theil	Kuznets	Atkinson 0.25	Atkinson 0.5	Atkinson 0.75	D9/D1
France	0.335	0.201	0.236	0.140	0.095	0.049	4.381
Poland	0.293	0.150	0.200	0.095	0.065	0.033	3.529
Portugal	0.393	0.257	0.282	0.177	0.121	0.062	5.719
Albania	0.374	0.258	0.266	0.171	0.117	0.061	3.948
Slovakia	0.242	0.111	0.169	0.073	0.051	0.026	2.692

Monetary Poverty

	Thresholds	%poor households	%poor people	%poor children	% median
France	6740	10.6%	8.9%	7.3%	50%
Poland	2995	9.2%	13.1%	18.1%	50%
Portugal	3338	9.5%	11.3%	18.3%	60%
Albania		*19.3%*	*21.2%*	*25.2%*	*50%*
Slovakia	2450	10.9%	8.6%	9.4%	60%

Poverty in living condition

	Thresholds Score>	%poor households	%poor people	%poor children
France	7/19	12.0%		
Poland	10/21	11.0%	9.40%	8.70%
Portugal				
Albania	7/15	15.4%	14.80%	16.70%
Slovakia	7/19	13.0%	13.60%	15.60%

Subjective poverty

	Thresholds Score >	%poor households	%poor people	%poor children
France	2/6			
Poland	4/8	9.3%		
Portugal				
Albania	3/4	17.0%	16.60%	18.70%
Slovakia	3/6		16.40%	19.20%

Next steps:

- **Seminar on June at Bratislava (Slovakia)**

At INSEE :

- use of permanent income for poverty
- measurement of transition on poverty
- link between poverty and unemployment using activity schedule in the ECHP
- Spatial dimension of poverty : regional . richest neighbourhood versus poorest
- Collaboration with other institutes using ECHP to poverty studies (cohort effects....)

SESSION 3:

USE OF POVERTY STATISTICS IN THE DESIGN AND MONITORING OF POVERTY ALLEVIATION POLICIES

Application of the Newly Developed Budget Standards in Australia

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AUSTRALIAN BUREAU OF STATISTICS

CONTENTS

1.   INTRODUCTION

The purpose of this paper is to update information previously provided to the Rio Group on budget standards in Australia. `Budget standards' refer to costings of baskets of goods and services which have been deemed necessary for different household types to maintain a given standard of living. The last paper presented by the Australian Bureau of Statistics provided details on the development of budget standards in Australia. This paper describes how the standards have been adopted following their release and their potential use for deriving equivalence scales.

The paper begins by reviewing the material that was presented previously. It provides details on what budget standards are, how the budget standards were specified and how the standards compare to other measures of adequacy in Australia, such as social security payments and the Henderson Poverty Line.

The second part of the paper examines reactions to the budget standards. It describes the institutional context in which the budget standards study was undertaken and the views of the government department that sponsored the study.

The last part of the paper describes the potential use of the budget standards for deriving a new equivalence scale in Australia. It considers some of the difficulties associated with producing equivalence scales, possible methods for deriving a scale from budget standards and preliminary results using the `itemised' method.

2.   BACKGROUND INFORMATION ON BUDGET STANDARDS

This section summarises information provided in the previous paper by the Australian Bureau of Statistics.

2.1   What are budget standards

The budget standards are costings of a given basket of goods and services which are considered necessary for a given household type living in a given location and time to maintain a given standard of living (Saunders, 1999a: 64).

Budget standards were produced first in York, England by Rowntree almost 100 years ago (Saunders, Chalmers, McHugh, Murray, Bittman and Bradbury, 1998: 31). Since then, they have been produced and used intermittently in both Australia and overseas (Saunders et al., 1998: 28-34). More recently, in 1993, the Family Budget Unit at the University of York published a set of budget standards for the United Kingdom (Saunders et al., 1998b: 31). The Australian budget standards represent "a process of incremental modification to the UK budget standards" (Saunders, 1998: 58).

In the Australian study, budget standards, or costings of baskets of goods and services were calculated for households living in Hurstville, Sydney in February 1997. These covered costs of housing, energy, food, clothing and footwear, household goods and services, health, transport, leisure and personal care (Saunders et al, 1998).

Separate standards were calculated for 46 budgets. They were calculated for households which varied in size, age and gender of household members, the labour force status of the adult members and dwelling tenure (Saunders, 1998b: 59). They were also calculated for two different living standards.

The living standards were referred to as the `low cost' and `modest but adequate' standards (Saunders, 1998b: 58). This paper describes only the low cost budget standards because these are of most policy relevance (Saunders, 1998b: 61). The low cost standard represents:

"_what may require frugal and careful management of resources but still allow social and economic participation consistent with community standards and enable the individual to fulfil community expectations in the workplace, the home and in the community. In round terms, it was seen as lying at about one-half of the overall median standard of living" (Saunders, 1998b: 59).

In contrast, the higher `modest but adequate' standard was seen as corresponding to the median standard of living of the community (Saunders, 1998b: 58).

2.2   How the budget standards were specified

The outcomes of the study are of course very much dependent on the specification of the budget standards. This was a challenging task, particularly because it is difficult to define exactly what is the standard of living enjoyed by either the median or half median of the community (Saunders, 1998b: 59).

Considerable effort was invested in specifying the standards so that they were based on the best informed judgements and most reliable data available (Saunders, 1999: 46). The steps taken are summarised by Henman (1998a: 72-78):

i.   In the first instance, households' ownership of goods and use of services were established. If 75% of households owned certain goods or used certain services, then these were included in the low cost budget. This process required some judgement. It was necessary to identify substitute goods so that these were not double counted. It was also necessary on occasions to aggregate household types, in particular sole parents, so that their ownership patterns would not reflect greater than usual financial constraints.

ii. Normative judgements on the contents of the basket were made where possible based on standards that existed and had some acceptance in the community. For example, the food budgets were based on nutritional requirements as described by dieticians.

iii. Expert opinion on decisions on the contents of the basket was provided by a steering group. Membership of this group included people from the leading welfare agencies, as well as a representative from the Australian Bureau of Statistics, the Australian Institute of Family Studies, the Australian Institute of Health and Welfare, the Australian Consumers' Association and the then Department of Social Security.

iv. Data from the 1993-94 Household Expenditure Survey was used to check that the specified standards matched, to some extent, community behaviour. However, the study organisers were keen not to rely too heavily on data based on actual behaviour since this would be contrary to the purpose of the study. The study aimed to produce standards at which people should be able to live, not the standards at which people currently live which are possibly constrained by lack of income.

v.   Finally, focus groups were conducted to ensure that the standards described community norms as perceived by those groups.

Thus, the standards were based on many judgements regarding living standards and needs of households, but they were far from arbitrary judgements (Saunders, 1999: 47).

2.3   Comparison of the budget standards to other measures of adequacy

A summary of the results of the study, which relate to the low cost budget is given in Table 1. The ratio of the budget standards to two other measures of income adequacy in Australia, social security payments and the Henderson Poverty Line˘ , are included.

A number of interesting points can be drawn from the Table. The first is that the budget standards are somewhat on the high side. In most cases, the ratio of the standard to social security payments and the

Henderson Poverty Line are greater than 1. Differences are particularly pronounced for the non aged single and sole parents.

TABLE 1
A COMPARISON OF THE LOW COST SPRC BUDGET STANDARDS, INCOME SUPPORT PAYMENTS AND THE HENDERSON POVERTY LINE, SELECTED HOUSEHOLD TYPES, SYDNEY

($pw in February 1997).

Household type	Low Cost Standard (LCS)	Henderson Poverty Line (HPL)	Social Security Payment (SSP)	Ratio of LCS/HPL	Ratio of LCS/SSP
Single female	294	243.9	197.4	1.21	1.49
Couple, no children	381.6	390.6	324.1	0.85	1.18
Couple + B14	500.1	392.5	398.7	1.27	1.25
Couple + G6, B14	602.1	462.4	450.6	1.3	1.34
Couple + G3, G6, B14	659.3	511.9	517.7	1.29	1.27
Couple + G3. G6, B10, B14	731.8	583.5	573.4	1.25	1.28
Sole parent + G6	371.8	267.3	290.7	1.39	1.28
Sole parent + G6, B10	485.7	338.9	342.6	1.43	1.42
Aged single	215	181.6	177.1	1.18	1.21
Aged couple	295.6	260.5	292.8	1.14	1.01

Source: Data is taken from Tables 12.21 and 12.22 in Saunders et al, 1998; formatting is taken from Table 1, Saunders, 1999.

Notes: All households except the older two households are assumed to be renting privately. The older households are assumed to own their home outright. The single female is assumed to be unemployed, the couple without children are both unemployed, couples with children have the male unemployed and the female not in the labour force, and older household members are all retired from the labour force. All figures have been rounded to the nearest 10 cents.

Key: G6 = girl aged 6; B14 = boy aged 14; G3 = girl aged 3; B10 = boy aged 10.

In comparison with overseas measures of adequacy, the standard of living implicit in the low cost budget standards for a couple with two children appear to be higher than the US poverty line but lower than the Canadian low income cut-off. According to Engel's law, the percentage of the budget allocated to necessities should decrease as living standards rise (Saunders, 1998: 64). The Australian low cost standard of living appears to be higher than the United States poverty line because it requires a smaller proportion of the total budget to be allocated to food˘ (Saunders, 1998: 64). The Australian low cost standard of living appears to be lower than the Canadian Low Income Cut-Offs because it requires a higher proportion of the budget to be allocated to housing, energy, food and clothing˘ (Saunders, 1998: 65).

3.   REACTIONS TO THE BUDGET STANDARDS

The first part of this section describes the institutional context in which the budget standards study was conducted. It shows that the study was undertaken by an independent research body although it was supported and published by the then Commonwealth Department of Social Security. The next part describes how the budget standards have been used by the Department. The standards have been seen as being very useful for informing debate on issues of adequacy and purpose of income support, but are considered to be necessarily subjective and to represent only one approach out of many for providing a benchmark of adequacy.

3.1   Institutional context of the budget standards study

The budget standards study was conducted by the Social Policy Research Centre which is located at the University of New South Wales . Although the Centre is largely funded by the Department of Family and Community Services (formerly the Department of Social Security), it operates as an independent research unit (SPRC, 1999: 7).

Above and beyond the Centre's usual or core budget, the budget standard study was commissioned by the Department of Family and Community Services (SPRC: 33). In addition, the Department was represented in the Steering Committee, provided comments on draft reports (Whiteford and Henman, 1998: 103) and published the final report (Saunders, 1998b: 57). Thus, the study was not produced directly by a government agency, but was undertaken in close co-operation with the Department responsible for income support policy in Australia.

The Australian Bureau of Statistics was not involved in the production of the budget standards other than as a member of the Steering Group.

3.2   Reactions of the sponsoring department

Much of the reaction of the Department of Family and Community Services is described in the first issue of their biennial journal, the Journal of Social Security, in 1998. The main themes raised in the Journal are described below.

One approach out of many

At the time that budget standards work was beginning in 1995, the Department of Social Security produced the policy discussion paper `Developing a Framework for Benchmarks of Adequacy for Social Security Payments'. The paper described a framework of research for evaluating the adequacy of social security payments. In the framework, budget standards were seen as one of several approaches that could be used for this purpose (Nicolaou, 1998). The paper argued that adequacy was ultimately a matter of (political) judgement but nevertheless, that judgement could be better informed by research (DSS,1995: 1-2). Research was needed to take into account the benefits of in-kind government benefits and services received by households, a descriptive approach was needed to evaluate what was the experience of living at current levels of social security payment and a prescriptive approach, as adopted in budget standards, was needed to evaluate what income is needed to attain a given standard of living (DSS, 1995: 1-2).

Appropriateness of assumptions and judgements

It was recognised from the outset that the budget standards approach was necessarily based on subjective judgements that would be questioned (DSS, 1995:1). In particular, the Department has been concerned that the low cost budget standards are too high. The low cost standard was intended to represent about one half of median expenditure, but instead represents approximately two thirds (Henman, 1998: 80). Possible reasons include:

 i.   prices were based on Sydney housing costs which are much higher than those experienced elsewhere in Australia (Henman, 1998a: 80),

 ii.   the cost of durables have been included in the budgets in a way that assumes that households have always lived at the low cost standard of living and will continue to do so indefinitely (Whiteford & Henman, 1998: 131),

 iii. furniture has been priced at the higher end of the market, at stores such as Ikea and Freedom (Henman, 1998: 81),

 iv.   there has been no allowance made for the purchase of second hand goods or use of hand-me-down clothing or toys (Henman, 1998: 81), and

v. it has been assumed that gifts received balance with gifts given although research indicates that gifts given outweigh those received by older and higher income households (Henman, 1998: 81-82).

Henman (1998a) and Whiteford and Henman (1998) both stress that it is important to keep the assumptions of budget standards in mind when using them to evaluate policy. They believe that modification of the budgets is also required for some research purposes (Henman, 1998b; Whiteford and Henman, 1998: 142).

A conceptual framework

The greatest benefit of the budget standards is seen in the way the study makes concrete and transparent the many assumptions regarding living standards and benefit adequacy. Through itemising and costing all items necessary for a given standard of living, the standards provide a consistent framework for evaluating judgements on income adequacy, in terms of both their conceptual and quantitative importance (Saunders, 1998b: 68). The process of development of the budget standards has been seen already as "invaluable in contributing to the debate about the purpose of [social security] payments and the living standards the payments should enable households to attain" (Henman, 1998a: 78). In particular, they have drawn attention to the need to consider for how long recipients are likley to receive payments so that payments are adequate for durable items (Whiteford & Henman, 1998: 140).

Thus, the standards are not used in isolation as an indicator of adequacy, but as foreshadowed in the Department of Social Security Framework for Benchmarks of Adequacy, the standards are making a significant contribution to the ongoing debate on income poverty in Australia.

4.   USES OF THE BUDGET STANDARDS FOR DERIVING EQUIVALENCE SCALES

Variations in needs of households of different size and composition for a given standard of living can be expressed in relative terms as equivalence scales or in absolute terms as in costs of children (Saunders, 1998b: 65). This section discusses the possible use of budget standards for deriving these.

Advantages of deriving equivalence scales using budget standards data

The derivation of equivalence scales is a complex and difficult task which is covered by an enormous literature on the assumptions and methodology involved. Scales can be based on poverty research including budget standards, expenditure estimates from household surveys and attitudinal data (Whiteford, 1985).

For scales which are based on the relative consumption of different households, the use of budget standards data has the following advantages over expenditure data:

i. One of the difficulties of deriving equivalence scales is to ensure that comparisons between households are made at the same standard of living (Deaton and Muellbauer, 1980: 192). In some scales, a proportion of expenditure on necessities, such as food, is used to indicate the same standard of living across households (Deaton and Muellbauer, 1980: 193).

    The main advantage of budget standards is that they have been explicitly designed so that standards of living are equivalent across households (Saunders, 1999: 46). This is not readily achieved in practice, but as discussed in Section 2 of this paper, considerable effort has been made towards this outcome. It seems likely that these attempts are superior to simple rules of thumb about proportions spent on food, for example.

ii. Another problem is that observed behaviour does not always indicate a household's needs (Whiteford, 1985: 126). As McClements (1978) points out, if households of a given type are universally poor and their spending is constrained by lower incomes, then equivalence scales produced using their expenditure data will assume that household types with lower incomes have lesser needs.

The budget standards have been designed so that needs are not financially constrained.

There are, however, some disadvantages associated with using the budget standards. These relate to how well the standards meet researchers' requirements. For example, Whiteford and Henman (1998: 123) argue that equivalence scales derived from budget standards will be affected by the treatment of durables in the standards.

Possible methods for deriving equivalence scales from budget standards data

As discussed in Saunders et al (1999b), Oldfield (1993) describes a number of possible methods for deriving costs of children from budget standards. These methods can also be applied to deriving equivalence scales. The methods include the deductive approach which involves simply deducting the costs of one household from another, so that the difference in cost is equal to the difference in the characteristics for the household. For example, the costs of a couple household are deducted from a household containing a couple plus two children and the difference is divided by two to produce a measure of the cost of one child (Oldfield, 1993: 177-178).

Other approaches are variants of the 'itemised approach' which involve the construction of individual budgets for children (Oldfield, 1993: 178). Public goods, or those that are shared between household members, are allocated to these budgets on a number of different bases which are described as the 'individual', 'per capita', 'differential' and 'normative' methods (Oldfield, 1993: 179). The 'individual' method excludes many shared costs from childrens' budgets (the family car, for example, is treated as a cost to adults only), the 'per capita' method allocates shared costs equally to household members regardless of age, the 'differential' method allocates extra costs associated with children to the childrens' budgets (eg the difference in the cost between a large and a small house) and the 'normative' method uses expert judgement to allocate full or partial or no costs of shared goods to childrens' budgets (Oldfield, 1993: 179-180).

Preliminary results using the 'itemised' method

In a recent article in the Australian Economic Review, Peter Saunders (1999a) presents the results of a preliminary study on the production of equivalence scales from the low cost budget standards using a variant of the itemised method. This method was chosen because it was the most consistent with that used in the construction of the Henderson equivalence scales against which the budget standards equivalence scale was compared.

Table 2 shows the equivalence scale implicit in the budget standard for a family of two adults and two children compared to the Henderson equivalence scale. The Henderson Equivalence Scale which is implicit in calculations of the Henderson Poverty Line, has been and continues to be widely used in Australia to estimate patterns of poverty despite significant reservations regarding its validity (Saunders, 1999: 43). The comparison is not exact, since there are possible differences between the standard of living implied by the Henderson Poverty Line and the low cost budget (Saunders, 1999:51) but is nevertheless interesting because it compares the income relativities that are currently assumed and those that are implied by the budget standards work.

TABLE 2

COMPARISON OF IMPLICIT EQUIVALENCE SCALES IN THE HENDERSON POVERTY LINE AND THE LOW COST BUDGET STANDARD FOR A FAMILY OF TWO ADULTS AND TWO CHILDREN

Cost component	Henderson points	Henderson percentage	Low cost budget points	Low cost budget percentage
Individuals				
Husband, aged 40	19.7	27.6	10.2	14.3
Wife, aged 35	10	14	9.4	13.1
Boy, aged 14	8.5	11.9	11	15.4
Girl, aged 6	8.2	11.5	7.7	10.7
Household				
Housing costs	15.7	22	23.3	32. 6
Other	9.3	13	9.9	13.9
Total	71.4	100	71.4	100

Source: Data is taken from Tables 3, Saunders, 1999a.

Notes: The Henderson points that have been applied are those for men aged under 40, women aged under 40, boys aged 6-15 and girls aged 6-15. The budget standard estimates have been reweighted to give the same total as the poverty line points system.

These preliminary results show that the housing costs are a much higher proportion of the budget standards than for the Henderson Poverty Line (Saunders, 1999: 55). The other large difference is the weight given to the male household head, which is lower in the budget standards (Saunders, 1999: 55). The weight for a 14 year old boy is slightly higher in the budget standards, and exceeds the cost of any other member of the household (Saunders, 1999: 55). It therefore appears that if the budget standard equivalence scales were to be adopted in income distribution research, then they are likely to identify quite different household types as living in poverty.

5. CONCLUSION

The budget standards are seen as neither the only nor an objective measure of income adequacy. Instead, they have fulfilled their intended role of providing a significant input into policy debate by creating greater awareness of what is meant by adequacy and what are the objectives of social security payments. It is possible that budget standards will be used to produce equivalence scales, and these will be seen in the same light. They will represent one of many possible ways of specifying the relative needs of different household types.

There is no expectation in Australia that there will ever be a definitive or objective measure of adequacy but that the best that can be achieved, is to inform the debate with a wide variety of infromation (DSS, 1995).

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Poverty Measurement: an Instrument to Design, Monitor and Evaluate Health Policy in Chile

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1.   INTRODUCTION: MEASURING POVERTY IN CHILE

Poverty in Chile is measured through the method of poverty line, which in money terms is equivalent to two pre-determined baskets of basic foods. At the end of 1998, the average per capita poverty line was estimated to be around US$80 per month. Extreme poverty was half of that. According to this estimate by the end of last year nearly 22 percent of the population lived under the poverty line and 5,6 percent were considered to be living in extreme poverty. The evolution of poverty in Chile between 1990 and 1998 is shown in Table 1.

TABLE 1
POVERTY EVOLUTION. 1990-1998

(as a percentage of total population)

Year	Extreme poverty	Total poverty*
1990	12,9	38,6
1992	8,8	32,6
1994	7,6	27,5
1996	5,8	23,2
1998	5,6	21,7

*Includes extreme poverty **preliminary figures
Source: Ministry of Planning, CASEN 1990, 1992, 1994, 1996, 1998.

For the purpose of poverty measurement monetary subsidies are included in the family income but imputed value of free services (e.g. education, health and others) provided by the state are excluded.

Doubtless, poverty reduction in the 1990's in Chile has been impressive. This result is the combination of two factors. First, a sound macroeconomic policy, which has boosted economic growth to an annual rate of 8,3 percent per year, and second, by an active, equitable social policy, aimed at introducing quality to economic growth. It can be mentioned that between 1990 and 1997 public expenditure on education, health and housing has doubled, and total social public expenditure accounts for 70 percent of the total government budget and represents 14 percent of GDP.

The measurement of poverty and poverty indicators may serve a useful purpose in the design, monitoring and evaluation of social policy. In fact, poverty statistics should always be capable to provide guidelines for the assessment of both economic and social policies. Depending on whether the figure is up or down, welfare reform and the revision of macroeconomic policies should be the most concrete follow-up after the poverty head count is known.

It seems fair to say that a good deal of time and effort has been spent on the question of how poverty should be measured. However the importance that the issue of proper measurement may have, we must always keep in mind that the ultimate goal is to eradicate poverty. As Mollie Orshansky stated in 1968, "unlike some other calculations, those relating to poverty have no intrinsic value of their own. They exist only in order to help us make them disappear from the scene...With imagination, faith and hope, we might succeed in wiping out the scourge of poverty even if we don't agree on how to measure it."[1]

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[1]   Mollie Orshansky, "Demography and Ecology of Poverty" Proceedings of a Conference on Research on Poverty (Washington DC: Bureau of Social Science Research, 1968) p 28

2.   POVERTY AND HEALTH POLICY

This paper deals with the issue of designing, monitoring and evaluating public health policy in Chile as a result of data arising from poverty measurement and poverty indicators.

Unlike education, usually considered a form of investment in human capital that enlarge the growth potential of any economy, health services could be associated with the idea of a maintenance programme that arise from any capital investment.

For this reason, education is commonly provided, at least at the primary level, on a free, universal basis. Sometimes, preventive primary health programmes are supplied on a similar basis but in most countries some co-payment is required for higher level of services.

Rising costs in health care is a worldwide concern. Not only because of the more complex and expensive treatment that need to be tackled but also because of the government willingness of most countries to increase coverage among the people, particularly the poor and the elderly. The legitimate aspiration to consider the access to health care as a fundamental right poses a great challenge to most countries, particularly the developing ones.

Chile is no exemption to that. With a GNP per capita of US$ 12.730 (purchasing power parity) in 1997 the country is ranked among the upper middle-income countries. However, its social indicators closely resemble those of an industrialized country. Public investment since the 1920's in health and nutrition, as well as basic education and drinking water and sanitation, have had a significant impact in reducing the incidence of transmittable diseases and malnutrition, playing a decisive role in reducing overall health improvements. Between 1990 and 1998 per capita public expenditure on health has more than doubled growing at an annual rate of 13 percent in real terms.

However, as public expenses in health care grows, both in absolute terms and as a proportion of total government expenditure, the question of cost recovering from those who can actually pay and targeting programmes for those in special needs becomes highly relevant. From this general statement two issues arise.

First, if co-payment is to be introduced, then it should be done on the basis of some form of equity, which means that positive, discriminatory factors need to be taken into account. Second, targeting programmes for those in special needs require the use of some indicators to identify them and measuring the potential beneficiaries.

It can be said that access to health care programmes, particularly for the poor, make people better off, improves their quality of life and helps them to increase their income and, as a result, overcome poverty. Therefore the impact on poverty of health policies and programmes should be considered in the design, monitoring and evaluation stages.

By and large, private health care expenditure inequalities are closely related to income inequalities. Therefore, public sector expenditure on health should try to compensate those who cannot afford private providers. However, the evidence for many developing countries shows that government expenditure do very little to correct those inequalities. Table 2 summarizes the results of the analysis and data on the distribution of benefits of public expenditures by Ministries of Health of four of a six countries case-studies on health system inequalities and poverty developed within the framework of a joint project between the World Bank and the Pan American Health Organization-United Nations Development Programme.

TABLE 2

DISTRIBUTION OF BENEFITS OF GOVERNMENT EXPENDITURE ON HEALTH BY INCOME QUINTILE

Selected Countries

Country	Q1	Q2	Q3	Q4	Q5
Brazil*					
Ecuador	12,5	15,0	19,4	22,5	30,5
Guatemala	12,8	12,7	16,9	26,3	31,3
Jamaica	25,3	23,9	19,4	16,2	15,2
Perú	20,1	20,7	21,0	20,7	17,5
Mexico*					

*Not available.
Source: Health Systems Inequalities and Poverty in Latin America and the Caribbean. Recent Trends: UNDP/PAHO/World Bank, October 1999.

Table 2 shows that Jamaica is the only country in which a large part of government expenditure goes to the lower income groups, making it pro-poor expenditure inequalities. In the case of Peru the distributive impact is neutral, that is to say, all the income groups benefit equally from government expenditure on health care services.

In the cases of Ecuador and Guatemala a larger proportion of government expenditures in health goes to high-income groups; i.e. pro-rich inequalities. Also, in these two countries the importance of Government expenditure on health as a proportion of GDP is relatively low: less than 2% of GDP.

3.   OVERVIEW OF THE CHILEAN HEALTH SYSTEM

The Chilean health sector can be described as a mix system characterized by a multiplicity of public and private providers, although the bulk of curative and preventive services are delivered through the government managed National Health Service System (NHSS), a vast network of ambulatory facilities and hospitals, coordinated by the Ministry of Health and covering over 60% of the fifteen million country's population

Chile is considered a pioneer in Latin America in providing publicly supported health programmes. In 1924, a general social insurance scheme that included sickness coverage for blue-collar workers was organized. In 1938 preventive health services were added. By the 1940's, infant and child milk distribution programmes for supplementary feeding had become well established. In 1952, medical programmes of diverse public institutions were consolidated under a unified health structure, the National Health Service (NHS). Up to the late 1970's, the NHS covered approximately 85 percent of the population, 10 percent was covered by private providers and 5 percent by the armed forces medical programme.

In the 1980's, the health care system was reorganized through a series of institutional and financial reforms. These included: i) the decentralization of the NHS in 26 geographically defined Health Service Areas, which operate the public hospitals within their boundaries; ii) the transfer of the responsibility, infrastructure and personnel for the delivery of primary health care to the municipalities; iii) the creation of a financial institution (National Health Fund, FONASA) for administering health sector resources; iv) the establishment of new mechanisms to finance hospitals and municipal health facilities according to the amount and type of services rendered; and v) establishing the legislative framework and financing mechanisms to support the development of prepaid private health insurance plans, the ISAPRE system.

Insured workers contributing to the National Health Fund (FONASA) and their dependents have the option of private providers under the Preferred Provider System where users pay varying levels of co-payments for generalist and specialist care. Insured workers may also opt out of the NHSS entirely by channeling their compulsory 7 percent health care payroll deductions to one of the private pre-paid health insurance plan within the ISAPRE system.

The Ministry of Health oversees the operation of the NHSS, which comprise four autonomous agencies: the National Health Fund (FONASA); the Central Supply Facility, in charge of procurement and distribution of pharmaceuticals and other medical supplies to public health facilities, as well as milk and other products provided by the National Supplementary Feeding Programmme (PNAC); the Institute of Public Health (ISP), responsible for quality control of pharmaceuticals and food products; and the Superintendency of ISAPRE, the government body created to regulate and control the private health insurance market.

The NHSS is financed through four major sources of revenue, all of them flowing to and administered by FONASA. The first one is the mandatory 7 percent payroll deduction for all workers that are not ISAPRE affiliates, accounting for roughly 35 percent of total income. Another 45 percent comes directly from the central government contribution as stated in the national budget law. The third source of revenue is the sale of vouchers to FONASA affiliates for selective services rendered under the Preferred Provider System, which represents 7 percent of revenues. Fees from the sale of services in public facilities and other forms of income are the fourth source of revenue and accounts for 13 percent.

4.   HEALTH CARE, POVERTY AND EQUITY POLICIES

In 1998 around 62 percent of Chile's population declared to be affiliated to the public health system, compared to 23,1 percent that ISAPRES affiliates. However, as table 3 shows, there are important differences in the provision of health services according to the level of family income. Thus, more than 86 percent of the poorest 20 percent of households is beneficiaries of the public sector but only 26 percent of the people that belongs to the richest quintile. On the other hand, the ISAPRE system provide health care mostly to the top quintile (55,4 percent of the group) and very little to the lowest quintile (4,0 percent of this income group)

TABLE 3
1998 HEALTH SERVICES
POPULATION DISTRIBUTION BY TYPE OF PROVIDER AND INCOME QUINTILE

Income Quintile	Public Sector	Armed Forces	ISAPRE (Private)	Independent	Others	Total
Q1	86,2	0,5	4,0	8,5	0,9	100,0
Q2	73,9	1,7	13,2	10,1	1,2	100,0
Q3	62,4	3,5	21,3	11,3	1,6	100,0
Q4	47,1	5,4	33,0	13,1	1,4	100,0
Q5	26,0	4,9	55,4	12,6	1,2	100,0
Total Average	61,8	3,0	23,1	10,9	1,2	100,0

Source: Ministry of Planning, CASEN98, July 1999

Access to health care is almost universal in Chile. Between 1990 and 1998 the percentage of people that did not receive health care when needed fell from 1,3 percent to 0,5 percent of total population.

As shown in table 4 the public system is particularly important for children under one year old and for people over 65.

TABLE 4
POPULATION DISTRIBUTION BY PROVIDER AND AGE
1998

age (in years)	Public System	Armed Forces	ISAPRE (private)	Independent	Other	Total
< 1	66,4	2,3	24,7	5,9	0,7	100,0
1 to 4	65,3	2,6	24,6	6,8	0,7	100,0
5 to 14	64,4	2,6	23,7	8,4	0,9	100,0
15 to 24	58,3	2,7	22,4	14,8	1,7	100,0
25 to 49	56,5	2,5	27,2	12,5	1,4	100,0
50 to 64	65,0	3,8	19,4	10,7	1,1	100,0
65 +	80,4	5,7	6,7	5,9	1,2	100,0
Total Average	61,9	3,0	23,1	10,9	1,2	100,0

Source : Ministry of Planning, CASEN98, July 1999

An important element of health care is related to the access of free medical prescription. It is in this area where, using poverty indicators, major progress has been made.

In 1990, the government recognized the insufficient coverage of free medicine available to the poor, particularly at the primary level of health care. To resolve this inequality a specific policy was designed and implemented which meant to increase the budget for this particular item. As a result, the coverage of free medicine as a proportion of actual prescription rose from 38,6 percent to 56,3 percent. This is shown in Table 5 below.

TABLE 5
PAYMENT OF PRESCRIBED MEDICINES IN THE PUBLIC HEALTH SYSTEM.
AS A PERCENTAGE OF PRESCRIPTION
1990 and 1998

Type of payment	1990	1998
All free	38,6	56,3
Some free	18,9	12,5
All paid	42,5	23,8

Source: Ministry of Planning, CASEN 1990 and 1998. July 1999.

Depending on the level of family income, the beneficiaries of the public health care system are classified into four categories, A, B, C, and D. This classification serves the purpose to determine the percentage of the cost of the service that the beneficiary is required to pay.

Co-payments for hospital services in the public sector range from zero in the lowest two incomes categories (A and B) to 10 percent in the third (C) and 20 percent in the top category. There is no co-payment required for primary care services offered in the public health facilities for any income group. In other words, health care at the primary level is free for all those families that are affiliated to the public system. For people affiliated to the ISAPRE system there is charge to be paid for services demanded at any public health facilities, including primary level.

Group A include families with low income, elderly and disabled people with subsidized pension payment, beneficiaries of a Family Subsidy Programme, and all families considered to be living in extreme poverty and are not contributing to the National Health Fund (FONASA).

The other groups are classified according to the following family income per month:

- Group B up to $ 90.500 (app.US$ 174) ;

- Group C between $90.500 and $ 114.826 (US$ 174 to 221);

- Group D $ 114.826 and above.

In 1996, it was estimated that 41 percent of the total people that are beneficiaries of the public health system belonged to health group A, 32 percent to group B, 13 percent to group C and 14 percent to group D. From these figures it is clear that public health in Chile is progressive, pro-poor and equality-oriented.

5.   COVERAGE AND TARGETING OF PREVENTIVE PROGRAMMES

One of the star preventive health programme closely associated with poverty eradication is the National Supplementary Feeding Programme (PNAC) whereby free food is distributed to all children under six, pregnant women and mothers breast feeding babies. Administered and financed by the public health sector, the only requirement for the beneficiaries is that they must attend a health control programme in any public or private health facility. The main objective is to diminish or avoid malnutrition of beneficiaries. Additionally, it serves the purpose to increase coverage of health controls both for children and pregnant women.

These activities constitute vital instruments to prevent and detect at a very early stage any problem that may impede a normal development of a child up to the age of six years old. The food distributed are milk, cereal and rice and are given in a higher quantity if the child exhibits symptoms of being undernourished or the risk to become one, and also if the pregnant mother is under-weigh.

In 1998 over one million children, were beneficiaries of the National Supplementary Feeding Programme and since 1990 the coverage increased from 67,7 percent to 68,2 percent. This increment was particularly significant among children of poor families and children of less than two years old. At the end of last year the programme was covering more than 93 percent of the children under two that belong to the poorest 40 percent of Chile's population, which compares positively with the 36 percent coverage for children in the top quintile.

Despite of the fact that this is a universal programme with free access for al children up to the age of six, irrespective of the level of the family income or the health system to which the family is affiliated there is a clear targeting of the services provided by the programme. As shown in table 6, more than 67 percent of the supplied food was delivered to children under six that belong to the poorest 40 percent of population.

TABLE 6
BENEFICIARIES OF THE NATIONAL SUPPLEMENTARY FEEDING PROGRAMME
PERCENTAGE DISTRIBUTION BY AGE AND INCOME QUINTILE
1998

Age (in years)	Q1	Q2	Q3	Q4	Q5	Total
< 1	33,9	29,2	18,6	13,3	5,0	100,0
1	39,8	25,1	18,1	12,4	4,6	100,0
2 to 5	39,8	28,9	17,9	10,3	3,1	100,0
< 6	38,8	28,2	18,0	11,2	3,7	100,0

Source : Ministry of Planning, CASEN98, July 1999

The above figure is consistent with the fact that a high coverage can be observed within the public health sector, where most of poor people are served (see Table 3), particularly among children under one year old, reaching nearly 93 percent of coverage, an increase of 5 percentage points from the 1990 figure.

6.   EVALUATING THE EQUALITY BIAS OF HEALTH PROGRAMMES AND POLICY IMPLICATIONS

In Chile, the main instrument available that can be used to evaluate whether social policy and social expenditure is actually helping to improve the quality of life, particularly of those worst-off is the biannual sample survey, called the Socioeconomic National Survey (CASEN). The first CASEN was taken in 1985 and then in 1987. The third was in 1990 and from then on it has been carried out every two years. Over 1 percent of total households are interviewed through a questionnaire with six modules, namely, i) the household residents basic data, ii) housing, iii) education, iv) health, v) income and employment and vi) other income.

The health module comprises 21 questions that have been kept fairly constants throughout the various surveys, and therefore most of the variables can be compared and followed their evolution.

Some of these variables, such as coverage, medication, provider according to age and others have already been analyzed in previous tables. By and large, it can be proved that during the 1990's health policies have had a pro-poor bias.

An important finding derived from the survey is that malnutrition has been constantly declining, particularly for children age 2 to 5 years old. In the last four years alone malnutrition for children under six has fallen from 2 percent to 0,5 percent. For children between 2 to 5 years old the reduction has been even greater, from 3,1 percent to less than 0,4 percent.

On the other hand, symptoms of malnutrition have detected among senior citizens, particularly those living in poverty or with very low income.

To tackle this problem, the Ministry of Health has recently launched a new programme of Complementary Feeding for Senior Citizens. Of course this new initiative does not mean to replace the children's programme. The importance of the later is widely recognized. But it is precisely the success in reducing malnutrition and the proper targeting in its implementation that has made possible to reallocate some of the resources from it in order to finance the programme for elderly people.

Table 7 below shows the equity bias of public expenditure on health programmes. 87,5 percent of net subsidies benefited the poorest 40 percent of population. The top quintile gets fewer benefits than what it pays as compulsory pay roll deductions.

TABLE 7
NET HEALTH SUBSIDIES PER HOUSEHOLD BY INCOME QUINTILE*. 1990
(percentage)

Type of service	Q1	Q2	Q3	Q4	Q5	Total
Consultations**	34,2	24,1	20,4	14,3	7,0	100,0
Nat.Supplementary Feeding Program	37,2	28,2	18,0	12,1	4,1	100,0
Compulsory payroll Deduction	7,3	16,9	22,4	26,5	27,0	100,0
Total net subsidies	57,1	30,4	18,6	4,0	-10,0	100,0

*Represents the net value of all health services provided by the public sector deducting the affiliates contribution and co-payment.
**Include preventive controls, consultations, lab. examination, radiology, dental care, surgery, hospital and labour attentions.
Source: Ministry of Planning, November 1999.

It is estimated that in money terms, the net subsidies received by the first quintile represents approximately 24 percent of their average income. In other words, if the health services provided by the state were added to the income of the poorest 20 percent, their average income would rise by 24 percent.

Similar conclusions can be drawn for other areas of social policy, i.e. education, monetary subsidies, housing, and government training programmes aimed at improving productivity and the quality of employment, which eventually leads to higher levels of income, and hence, to overcome poverty

Indexes of Social Lag in the Communities of Mexico. An Application

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1.   BACKGROUND

In the Threshold of the XXI century, the main challenge for Mexico is to decrease its poverty and to achieve a social justice, giving special attention to families living in extreme poverty, to excluded regions, to native communities, and to social groups with great disadvantages.

The unequal development of the country and its regions, the high levels of concentrated income, the manner that human settlements are distributed regarding the availability of natural resources - i. e. water-, as well as a high concentration and a high dissemination of the population, among other factors, have urged on the search for alternatives to alleviate the poverty conditions of millions of Mexicans, and at the same time to find better ways of development whit social justice.

Because of the above, the current social politics are planned through a serie of services and support programs that need the people from communities with a high social lag and exclusion, such as food, health, education, jobs, roads, sewerage, and other services as electrical and water systems.

It is important to mention that the census and survey information produced by the Instituto Nacional de Estadística, Geografía e Informática (INEGI), is widely used by Government Offices for the planning of politics about social aide.

2.   INDEXES OF LAG

On november 1996, the Instituto Nacional de Estadística, Geografía e Informática (INEGI) and the Government enterprise Distribuidora e Impulsora Comercial, S.A. (DICONSA) -which is responsible for the supply of food and basic products to the most lag sectors, managing a system of popular supply stores-, signed a cooperation agreement to develop a study about the social marginality and lag into rural localities and AGEBS[1], through the construction of social lag indexes.

At the beginning of this survey, DICONSA had more than 20,000 small stores distributed along the Mexican territory. These establishments offered food and non-food products for general consumption at a cost under the cost of the private commerce; at the same time, DICONSA played a role as a price controller.

2.1.   Objective

The main objective of this proyect was to establish criterions to re-distribute all the stores along the Mexican territory and to decide the openning of new popular supply stores where the population requires them the most.

Specifically, the study had the purpose of determining the degree of lag of the country's geographic units, grouping them into similar stratums with similar characteristics.

2.2.   Requirements

Data from the 1990 Population and Housing General Census were used for this survey. This data was updated with the results of the 1995 Population and Housing Counting.

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[1]   Group of 25-50 blocks perfectly defined by streets, avenues, alleyways or any other type of sing for identification.

The selected variables were those that in a certain manner represents critical lacks related to life conditions of the population. Based on these variables, composed indexes were produced by means of the analysis of the robust principal components method. This method is described in issue 3 of this paper.

The construction of the indexes allowed to know the factors that define the deficiencies of the social-economic development, the unsatisfied basic social needs, and in general, levels of well-being the population living in the geographic units.

Index of Social Lag (ISL). This is a global index that allows to plan strategies and action lines to develop projects and social programs to improve the levels of well-being the population living with limited resources.

Index of Basic Lacks (IBL). It reflects the level of satisfaction of the most important basic needs of the population, allowing to elaborate policies to focus subsidies for basic goods.

Index of Infrastructure Lacks (IIL). It reflects the public services resources of the community. It is useful to plan social politics related to the requirements of social and physical infrastructure into the communities.

As an example, a classification table for the country's rural localities and urban areas with a population of more than 50 inhabitants, according to the 1990 Population Census data and classified according to the Social Lag Index results, is showed:

TABLE 1

Stratum	Number of rural localities (50 and more inhabitants)	Number of AGEB (50 and more inhabitants)	Social Lag
1	9,150	9,173	Very low
2	14,110	10,218	Low
3	15,932	7,235	Medium
4	14,989	5,215	High
5	7,608	2,294	Very high
TOTAL	61,795	34,135	

From the total of rural localities, 36.7% were classified into the category of high and very high social lag, while into the urban areas (AGEB), 22% were under these conditions.

Impact of the survey

On the basis of the performed survey, DICONSA carried out a purging and adjustment process into the national network of supply; reaching with this a reorientation of its development strategies, as well as to improve the network growth, focusing it fundamentally, to the country's rural zones. The plan is to move away, gradually, from the urban zones, because in there already exist other supply alternatives. In this way, DICONSA strenghts its presence into the weaker rural zones.

Table 2 is a comparative of the reorientation supply program impact taken from the performed survey.

TABLE 2

Concept	Before the Survey (1995)		Current Situation (1998)	
Nomber of Stores:				
Total	21,614	(100.0%)	23,900	(100.0%)
Rural areas	20,553	(95.1%)	23,652	(99.0%)
Urban areas	1,061	(4.9%)	248	(1.0%)
Population being benefited (millons the inhabitants):				
Total	29.6	(100.0%)	29.5	(100.0%)
Rural	26.5	(89.5%)	28.4	(96.3%)
Urban	3.1	(10.5%)	1.1	(3.7%)

As showed in table 2, the number of stores increased in the 1995-1998 period; however the amount of beneficiaries was almost constant, mainly due to the relocation of stores from urban areas with less lag to the depressed rural areas in which a minor amount of inhabitants lives.

The reorientation of this program caused that beneficiaries from the rural zone were increased in absolute terms as much as in relative terms. In urban areas there was a decrease. Because of the above, the supply of the basic basket of food for general consumption, was strenghtened.

At the present, the Rural Supply Program is operating as follows:

- In 2,303 municipalities (95% of the national total), of which:

- 1,118 municipalities have a high and a very high lag (97% of the total in that situation)

- 1,048 have medium or low lag (93.7% of the total in that situation)

More than 30% of the indigenous pupulation is living into 803 of those municipalities, and there are 778 stores there. In total, exist 23,900 community stores which cover 71,232 rural localities, 33% in a direct manner and 6,790 in influence zones.

3.   DESCRIPTION OF THE METHODOLOGY

This is a summary of the statistical procedures used to generate indexes for lag per locality and per group of blocks, as well as the stratification of geographic units. Also, the method to detect outliers is described. This method was useful to decide over the application of a robust procedure by which these indexes were obtained; it means, a method that was not affected by observations that became from the main structure of the data.

3.1.   Construction of indexes

The selected variables were taken as basis to construct the synthetic indexes that summarize in a great way the information contained into them in variance terms. To this purpose the multivariate statistical technique, known as *robust principal components*, were used. These are linear combinations of the original variables. There exist so many components (independent) as variables had been considered. Particularly, the first component is the one that absorbs more information from the group of variables. In the process of calculation of such components a complete weighting is given to the observations that probably are in the main structure of the data, and a reduced weighting is given to the outliers. The first "conventional" component was taken as initial estimation, to obtain -after a serie of iterations- the corresponding robustness; from this, the other robust components are produced in a progressive order.

In each case, the index produced by the first principal component take positive and negative values around its mean (it is zero when the matrix of correlations is used), it makes that the interpretation gets certain degree of abstraction, and not being too immediate. That was the reason to transform the index to a scale from 0 to 100, being able to express it in percentage terms and to locate the position in which an observation unit (OU) is found with respect to the others. The transformed index will take the minimum value of zero if there were any OU with minimum values in all variables. In the other extreme, this index takes the maximum value of one hundred when exists a OU with maximum values in all variables. It is important to mention that this transformation preserves the relative distances of the index original values.

3.2.   Stratification of the units

A stratification of geographic units based on the mentioned lag indexes was made to form groups of homogenous units to easy the administration planning. For this case, the Centroide Method (mean in the univariated case) was used. It consists in minimize an objective function that guarantees the homogeneity of the units into each stratum. To make this method to function it is necessary to feed it with an initial classification, to obtain this classification the method of Dalenius and Hodges was used.

The definition of the number of stratums consisted in a serie of test, from 2 to 9 stratums; the one where the units into the stratums were enough homogenous was chosen. In this case, the number 5 fulfilled this condition.

3.3.   Outliers

In the present study, two procedures to detect multivariated outliers were used: a) Mahalanobis distance, which consists in weighting the observation distances at the mean by the matrix of covariances, and to compare it with the Chi-square distribution. In some cases, this method did not practically detected outliers, so it was decided to apply procedure b) Functions of Cambell influence, where the M-estimators are used. These could be considered as a modification of the classic estimators, then a complete weighting is assigned to the observations coming from the data main structure, and the influence of the observations located at the end of the contaminating distribution is reduced. In the final stage of the process, observations whose weighting is lower than one are extreme, and they become even more extreme when the weighting is moving closer to zero.

4.   FINAL COMMENT

In the past decade, the INEGI accumulated an infrastructure in human resources and informatic development that has allowed to expand options to generate basic statistics. Besides, through agreements with divers government agencies which are responsible of projects related to social policies, INEGI offers support on the application of methods that facilitate the study of the geography of the marginality and poverty,

In this sens, the study made jointly with DICONSA, has been as a detonator to make other applications under similar schemas.

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Ethnic Poverty and Social Vulnerability Data Sources from United States Census and American Community Survey Data

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CONTENTS

ABSTRACT

The United States Census provides an array of possible sources of ethnic and racial information which includes the following questions: (1) race; (2) Hispanic origin; (3) ancestry; (4) place of birth; (5) citizenship; (6) year-of-entry; and (7) language. While the breadth of ethnic and racial census data is striking, the power of census-based data is clearest when the geographic detail is overlaid. Specialized surveys conducted in the United States (Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS)) provide finer and more timely measurement of income and poverty than a census, but they tend to lack the breadth of subject matter coverage, and subnational geographic detail. A new survey to be implemented in the United States, the American Community Survey (ACS), will soon begin to provide the complete range of census equivalent data on a yearly basis, and over time will provide the data for low geographic levels. Therefore, a more continuous measurement of poverty and social vulnerability of ethnic and racial groups will potentially be available to policy makers. Effective utilization of this data will require the development of tabulations, previously ignored due to the infrequency of the data for monitoring purposes. Although census data alone have not traditionally been the finest tool for measuring poverty or other aspects of social vulnerability, the addition of the ACS in the United States will certainly upgrade the utility of census-like data as both a detection and monitoring tool.

INTRODUCTION

"...America's poverty agenda is now inseparable from its racial debate."

Hugh Helco, "Poverty Politics," in Confront Poverty Prescription for Change

A better statement is that the poverty agenda is inseparable from the race and ethnicity in America. Indeed, the collection of race and ethnic data has been a central issue for the federal government in preparing the data agenda for the next century.

The 2000 round of censuses is upon us, and a vast array of governments, state and private enterprises, non governmental agencies, scholars, and others await the barrage of data that will be forthcoming. Indeed, decennial censuses provide a wealth of socioeconomic data, but this rain of data is like a monsoon which will subside and not return until next season. A decade is a long season. This decade of data dearth is not complete since some countries have intercensal survey programs, or mid-decade censuses; however, these intercensal data collection activities often lack the geographic coverage of a census. The planned introduction of the American Community Survey (ACS) in 2003, portends to offer census-like data for many of the same levels of geography that are available from a decennial census.

The United States' decennial census for the millennium, Census 2000, offers a number of possible sources of ethnic and racial data which include questions on: (1) race; (2) Hispanic origin; (3) ancestry; (4) place of birth; (5) citizenship; (6) year-of-entry; and (7) language. Each of these questions will also appear in the American Community Survey. Ethnicity, race, poverty, and social vulnerability are deeply entwined. In this paper, the following topics are covered: (1)ethnic, racial, and poverty data from the United States Census 1990 and 2000; (2) ethnic, racial and poverty data from the American Community Survey; (3) standardization of race and ethnic questions; (4) future data sets; and (5) a new question in Census 2000. However, an understanding of the concepts of race, ethnicity and poverty for federal data collection and reporting purposes needs to be established.

FEDERAL GUIDELINES FOR THE COLLECTION OF ETHNIC AND RACE DATA

The federal government first established ethnic and racial data collection and reporting standards in 1977. The adequacy of these standards was recently reviewed and the standards were revised in the fall of 1997.

Federal statistics on ethnicity and race are governed by guidelines established by the Office of Management and Budget (OMB). These guidelines were formed to address specific domestic needs arising from legislation and judicial rulings relating to discrimination and selected social issues of national importance. Therefore, these guidelines do not necessarily conform with the concept of ethnicity as perceived by the man-in-the-street. Nor do they necessarily conform to the main currents of thought on ethnicity taught in the schools of social science.

Federal guidelines first established by OMB in 1977 laid out minimum data collection and reporting standards for race and ethnicity (OMB). Two ethnic categories were established: 1) Hispanic; and 2) Non-Hispanic. Members of either ethnic group can be of any race.

In its efforts to serve the population, the government periodically conducts surveys to determine the adequacy and the application of the concepts. Recently, two large scale Census Bureau surveys were implemented to examine such issues; these surveys were: 1) the National Content Survey; and 2) the Race and Ethnic Targeted Test. The results of these tests and other research from other federal agencies were reviewed by a federal interagency committee, and recommendations were made to OMB on the possible revisions to the racial and ethnic data collection and reporting standard.

In the fall of 1997, the OMB issued revised standards for race and ethnic data collection and reporting (OMB, 1997). The changes for ethnicity were limited to: 1) the addition of the word "Latino" in the wording of the Hispanic origin question; 2) the use of distinct questions for race and ethnicity, those types of data are collected by self-report; and 3) the placement of the ethnicity question (Hispanic origin) prior to the race question to improve item response. There were more extensive adjustments to the racial data collection and reporting standard, which included: 1) the option to declare more than one race; and 2) the creation of separate categories for Asians and Pacific Islanders. Finally, OMB indicated that the collection of more detailed race and ethnic data is permissible if these data can be folded back to the minimum racial and ethnic categories in the revised standard.

DEFINITION OF POVERTY FOR FEDERAL STATISTICS

The official definition of poverty is determined by the Office of Management and Budget.

The poverty thresholds utilized by the U.S. Bureau of the Census have their origin in the work of Orshanky (U.S.B.C., 1993). This threshold poverty measure is based on pre-tax income adjusted for inflation using the Consumer Price Index.

The establishment of a standard data series by the OMB based on this measure does not preclude other analysis or the development of other measures of poverty, as long as the alternative analysis and/or measures are distinguished from the official standard poverty data series.

A clear distinction needs to be made between poverty thresholds, the official measure of poverty, and poverty guidelines, an administrative poverty tool. Poverty guidelines are issued yearly by the Department of Health and Human Services and are used for administrative purposes. However, the poverty thresholds are a statistical tool which is used to estimate the population in poverty. For additional information on poverty, consult the Census Bureau's website (http://www.census.gov/hhes/www/poverty.html).

AMERICAN COMMUNITY SURVEY - DECENNIAL CENSUS LINK

Although there are many linkages between the American Community Survey and the decennial census, it should be made clear what this survey is not. This survey is not:

(1) a population count; and

(2) a measurement for apportionment of Congress.

These two functions are in the domain of the decennial census according to the Constitution of the United States.

However, the American Community Survey is a continuous demographic survey designed to yield:

(1) annual and multi-year estimates of population and housing characteristics;

(2) produce information for small geographic areas (states, counties, cities, towns, and census tracts)

The implementation of this large scale survey includes three phases: (1) the demonstration phase (1996-1998); (2) the comparison sites phase (1999 -2002); and (3) final implementation stage. Implementation of the American Community Survey will be in all 3000 plus counties in the nation. Planned products from this effort include the following:

(1) yearly profiles for communities of 65,000 or more;

(2) two to five year cumulations for communities of less than 65,000;

(3) summary tabulations similar to census tabulations; and

(4) Public Use Microdata Sample files.

To understand the differences between the data availability between the American Community Survey and a decennial census, the following sections deal with data availability from the 1990 census for selected sources of racial and ethnic data. Following the decennial overview, there is a brief look at the geographic availability of data from the American Community Survey to date. The lengthy appendices present technical documentation from: (1) the 1990 census on selected racial and ethnic concepts; and (2) technical documentation on the same concepts from the American Community Survey with a brief comparability statement. In the end, selected information is provided on the content, geography, and comparability between the decennial census and the American Community Survey.

DECENNIAL CENSUS DATA AVAILABILITY

Race and ethnicity data, for the United States, is available from decennial censuses from the following questions: (1) race; (2) Hispanic origin; (3) ancestry; (4) place of birth; and (5) language. However, much of this type of information is often enhanced by the cross with information from two additional questions which are: (1) citizenship; and (2) year of entry. All seven questions are part of the long form which is asked of approximately one in six households, but only the race and Hispanic origin questions appear on the longform and the short form, which is asked of the remaining households. This section will concentrate on Hispanic origin, ancestry, place of birth (foreign-born component), and language.

HISPANIC ORIGIN

Hispanic origin is of key importance in the United States, since it is one of the two official ethnic groups for federal reporting purposes. The 1990 the tabulations iterated Hispanic origin for 17 specific categories, and several generic categories, while the Census 2000 tables will expand this slightly (See Table 1).

TABLE 1
ITERATIONS OF HISPANIC ORIGIN IN TABULATIONS: 1990 AND PLANNED 2000

1990 Census	Census 2000
Hispanic Origin (of any race)	Hispanic Origin (of any race)
Mexican	Mexican
Puerto Rican	Puerto Rican
Cuban	Cuban
Other Hispanic	Other Hispanic
Dominican (Dominican Republic)	Dominican (Dominican Republic)
Central American	Central American
Costa Rican	Costa Rican
Guatemalan	Guatemalan
Honduran	Honduran
Nicaraguan	Nicaraguan
Panamanian	Panamanian
Salvadoran	Salvadoran
Other Central American	***
South American	South American
Argentinian	Argentinian
XXX	Bolivian
Chilean	Chilean
Colombian	Colombian
Ecuadorian	Ecuadorian
XXX	Paraguayan
Peruvian	Peruvian
XXX	Uruguayan
Venezuelan	Venezuelan
Other South American	***
All other Hispanic	All other Hispanic/Latino

Notes: XXX equals not specified in 1990.
   *** equals not specified in Census 2000, but figure can be derived.
Source: U.S. Bureau of the Census, 1993, 1990 Census of Population Social and Economic Characteristics New York Section 1 of 3 (1990 CP-2-34), Table 4; and unpublished preliminary Census 2000 tabulation plans.

Published iterations of Hispanic origin were available from the 1990 census at the subnational level for states and counties. Reduced sets of Hispanic origin groups were published for: (1) Place and [In Selected States] County Subdivision [10,000 or more persons], and (2) Place and [In Selected States] County Subdivisions of 2,500 or More Persons]. The cross of Hispanic origin groups by selected social and economic characteristics provides varying levels of detail at sub-state level which conform to confidentiality guidelines.

ANCESTRY

The ancestry question is an open-ended self-declaration question. Multiple ancestry declarations are allowed, but only two codeable declarations are tabulated. Religion, if reported, is placed in the

uncodeable category, due to the federal governments restriction on the collection and tabulation of religious information. In 1980 and 1990 there was no editing or imputation of this item, but there will be limited editing in 2000.

The ancestry question is not used as an official source of Hispanic origin or racial data, official race and Hispanic origin data comes from their respective questions. However, it is a source of a wide array of data for the remaining ethnic groups. Data collected by the ancestry question is much more the man-in-the-street concept of "ethnicity" than the Federal definition of ethnicity discussed earlier.

In 1990, counts of approximately eighty specific ancestry groups (See Appendix A. Table 1) were available at the state, county and (in many states) place and county subdivisions of 10,000 or more persons. For lower levels of geography, counts were available for a reduced subset of ancestry groups (See Appendix A. Table 2).

Ancestry crossed with select social and economic characteristics was published only at the national level for select ancestry groups. However, the Public Users Microdata Set (PUMS) can be used to obtain cross tabulations for areas of 100,000 or more.

FOREIGN-BORN POPULATION

This is a unique population group that causes data presentation problems for the census. In 1980, the U.S. Bureau of the Census published a detailed set of socio-economic tables for a vast number of places of birth but in 1990, detailed socio-economic tabulations were limited to the places of birth listed in Table 2.

TABLE 2
PUBLISHED DETAILED SOCIO-ECONOMIC TABULATIONS FOR THE FOREIGN-BORN POPULATION: 1990

Continent	Number of Countries	Country Names
Asia	12	Cambodia, China, Hong Kong, India, Iran, Japan, Korea, Laos, Philippines, Taiwan, Thailand, Vietnam
Europe	11	France, Germany, Greece, Hungary, Ireland, Italy, Poland, Portugal, Soviet Union, United Kingdom, Yugoslavia
North America	2	Canada, Mexico
Caribbean	5	Cuba, Dominican Republic, Haiti, Jamaica, Trinidad & Tobago
Central America	5	El Salvador, Guatemala, Honduras, Nicaragua, Panama
South America	4	Colombia, Ecuador, Guyana, Peru
Africa	None	None
Oceania	None	None

Note: The Soviet Union was grouped with Europe for presentation purposes.

Source: U.S. Bureau of the Census, 1993, 1990 Census of Population The Foreign-Born Population in the United States (1990 CP-3-1), pp II-1 - II-5.

For the 1990 census, detailed counts of the foreign-born population were available for place of birth (See Table 3). Published counts were available at the state and county levels, and at the sub-county level for selected states for areas of 10,000 or more persons.

TABLE 3

PUBLISHED DETAILED COUNTS OF THE FOREIGN BORN: 1990

Area	Number of Countries Detailed	Countries
Africa	7	Cape Verde, Egypt, Ethiopia, Ghana, Morocco, Nigeria, South Africa
Asia	24	Afghanistan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Korea, Laos, Lebanon, Malaysia, Pakistan, Philippines, Saudi Arabia, Syria, Taiwan, Thailand, Turkey, Vietnam
Europe	25	Austria, Belgium, Czechoslovakia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Soviet Union, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia
North America	2	Canada and Mexico
Caribbean	8	Bahamas, Barbados, Cuba, Dominican Republic, Grenada, Haiti, Jamaica, Trinidad and Tobago
Central America	7	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama
Oceania	2	Australia and New Zealand
South America	10	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Peru, Uruguay, Venezuela

Note: The Soviet Union was grouped with Europe for presentation purposes.

For lower census geography, Place and [In Selected States] County Subdivisions [2,500 to 9,999 Persons], detailed place of birth data was not available. Only eight broad categories were published, which included: (1) Europe; (2) Soviet Union; (3) Asia; (4) North America; (5) South America; (6) Africa; (7) Oceania; and (8) Area not reported.

Foreign-born data crossed with selected social and economic characteristics were published only at the national level for selected groups. However, the Public Users Microdata Set (PUMS) can be used to obtain cross tabulations for areas of 100,000 or more.

LANGUAGE

This is another subject matter with data presentation problems. In 1990 no special socioeconomic tabulations, like the ancestry, foreign-born, and Hispanic origin, were produced as part of the census tabulation process. However, another government agency (U.S. Department of Education, Office of Bilingual Education and Minority Language Affairs, and the National Center for Education Statistics) funded the publication of some socioeconomic tabulations based on language, which are similar to the aforementioned census tabulations. The content of these national level tables is summarized in Table 4.

TABLE 4

LANGUAGE STUB AND LANGUAGES WITH NATIONAL SOCIOECONOMIC TABLES PUBLISHED: 1990

All households	English only households	Non-English language households		
		Total	All persons 14+ in household speak other language	Linguistically isolated house

Language Tabulated: Only English, Non-English, Indo-European, Jamaican Creole, German, Pennsylvania Dutch, Yiddish, Dutch, Swedish, Danish, Norwegian, Italian, French (excluding French Creole, Cajun), French Creole, Cajun, Spanish or Spanish Creole, Portuguese or Portuguese Creole, Romanian, Irish Gaelic, Greek, Albanian, Russian, Ukrainian, Czech, Polish, Slovak, Slovene, Serbocroatian, Other Slavic, Lithuanian, Lettish, Armenian, Persian, Hindi and related languages, Bengali, Marathi, Panjabi, Gujarethi, Other Indic, Other Indo-European Languages, Asian or Pacific Island, Chinese, Korean, Japanese, Malay, Miao (Hmong), Non-Khmer (Cambodian), Thai (Laotian), Indonesian, Vietnamese, Tagalog, Ilocano, Chamorro, Other Northwest Austronesian, Samoan, Tongan, Hawaiian, Other Pacific Island Languages, Turkish, Telugu, Malayalam, Tamil, Other Dravidian, Other Asian Languages, Other Languages, Finnish, Hungarian, Arabic, Hebrew, Syriac, Amharic, Kru (Kwa), Swahili, Other African, "Eskimo, Aleut, Yupik, Inupik," Navaho, Apache, Dakota, Cherokee, Pima, Other Native North American Languages, Other and Unspecificed Languages.

Source: U.S. Bureau of the Census, no date, Social and Economic Characteristics of Selected Language Groups For U.S. and States: 1990, Table 7.

This same set of tabulations provides language counts on the state level by broad age groups. The available age groups include: (1) five years and over; (2) 5-17; (3) 18-64; and (4) 65+. A key trait of this information, be it socioeconomic tabulations or just counts, is the availability of information on the population "in linguistically isolated households." The definition of linguistic isolation is as follows (also see 1990 Census Definitions in Appendix B):

> *A household in which no person age 14 years or over speaks only English and no person 1 year or over who speaks a language other than English speaks English "Very well" is classified as "linguistically isolated." All the members of a linguistically isolated household are tabulated as linguistically isolated including members under age 14 years who may speak only English.*

The U.S. Bureau of the Census is using linguistic isolation in Census 2000 as one of the variables in developing a database for targeting "Hard-to-Count Neighborhoods."

Published census data from 1990 included the following tabulations at the state, county, and place and subcounty divisions of 10,000+ (in general): (1) Language Spoken at Home (persons 5+); (2) Language Spoken at Home by Ability to Speak English (persons 5+); (3) Ability to Speak English (persons 5+); and (4) Ability to Speak English in Household (persons 5+ in households). For places and subcounty divisions of 2,500 to 9,999 (in general) only tabulations two, three and four were published.

For language issues, the Public Users Microdata Set (PUMS) can be used to obtain cross tabulations for areas of 100,000 or more.

CENSUS DATA - POVERTY AND SOCIAL VULNERABILITY

The decennial census of the United States provides a wide range of ethnic data from a number of questions. There is an extensive amount of data on race (not detailed herein) and Hispanic origin at almost all levels of geography. In addition, there is an extensive quantity of poverty-related tabulations for these groups at the various geographies. However, socioeconomic tabulations available at the national level, were not necessarily reproduced for states for substate geographies. The Public User Microdata Sets (PUMS) would be the only no-cost source for reproducing these tabulations, but the geography would be restricted to areas of 100,000 persons or more.

The decennial censuses of the United States are **not** the primary source of poverty data. The primary sources of poverty information are the Current Population Survey, the primary survey of the U.S. Bureau of the Census, and the Survey of Income Participation Programs which is a longitudinal survey. These surveys collect much finer economic data than a census, but the ethnic detail is lacking. These surveys collect data and release data in a more timely manner than a census, but lack the geographic detail of a census. However, the introduction of the American Community Survey changes the face of census-like data, since it will provide much of the geographic detail of a census and release the data on a yearly basis.

In Census 2000, a new question has been added which is referred to as the "Caregiver," or more frequently, the "Grandparent" question. The question seeks to address the issue of who is caring for the youth of the country. It is thought that grandparents are playing an increasing role, thus bringing the two extremes of our population into contact. It is also thought that this may be more prevalent among selected racial or ethnic groups. This single issue raises a number of sub-issues simultaneously related to the vulnerability of both the youth and the aged. Issues include:

(1) Is care giving an economic burden that places some sectors of the aged population in jeopardy?

(2) Are portions of the youth of the country placed in jeopardy while in the care of the aged?

These questions, and others, cannot be adequately addressed until we have a body of knowledge that indicates the extent of the problem and places some dimensions on the problems. Without a doubt, the ethnic and racial dimensions of this issue are of key importance. Census 2000 will start us down this road, and the American Community Survey will expand our knowledge base for this issue.

Census 2000 is adding a new level of geography which is of key importance for the Hispanic origin groups. This new level of geography deals with "Colonias." In rough terms "Colonias" are agglomerations which developed informally over time.   The "Colonias" will have special coverage in the state of Texas. Since it is assumed that the "Colonias" are highly Hispanic, this will be an area of study in the post Census 2000 period for the U.S. Bureau of the Census. The unique ethnic nature of the "Colonias" and their informal origin may indicate the possible presence of a broad range of social vulnerability issues including: (1) education; (2) linguistic isolation; and (3) a host of housing and infrasturcture issues. Hopefully, there will be a number of "Colonias" of sufficient size, so that they will appear in the intercensal data products of the American Community Survey.

AMERICAN COMMUNITY SURVEY: A NEW DATA HORIZON

In the post Census 2000 period, the American Community Survey is planned to be the continuous measurement program of the U.S. Bureau of the Census. This program will set a new horizon on census data that will not let the sun set upon this type of data. The American Community Survey will consist of a questionnaire that asks the same questions as the long form census questionnaire. The same data will be collected throughout the decade.

Currently the American Community Survey is in the fourth year of field testing. The questionnaire, coding, edits and other particulars are being modified to reflect the final Census 2000 questionnaire, edits, etc. An overview of the data availability from the test sites for the past three years are found in Table 5. The three year aggregations of data are currently being reviewed for final data product release. With the design of the American Community Survey, time works in favor of the survey because the ability to perform data aggregations which expands the level of geography for which data is available. At present, the first three-year aggregations are being reviewed; although two-year aggregations were done last year (See Table 6), the true potential for this survey will be with the three-year and five-year aggregations.

TABLE 5
AMERICAN COMMUNITY SURVEY SITES: 1996 - 1998

Year	Site	Sub-geography
1996	Rockland County, New York	Not Applicable
	Brevard County, Florida	Not Applicable
	Fulton County, Pennsylvania	Not Applicable
	Multnomah County and the city of Portland, Oregon	Not Applicable
1997	Rockland County, New York	Clarkstown, Ramapo town
	Brevard County, Florida	Melbourne city, Palm Bay
	Fulton County,Pennsylvania	#
	Multnomah County and the city of Portland, Oregon	Gresham city, Portland city
	Douglas County, Nebraska	Bennington Village, Elkhorn city, Omaha city, Ralston city, Valley city, Waterloo Village
	Franklin County, Ohio	Columbus city-Franklin Country pt
	Houston, Texas (Harris and Fort Bend Counties)	Fort Bend County, Harris County, Houston city-Harris County pt, Houston city, Pasadena city
	Otero County, New Mexico	#
1998	Rockland County, New York*	Clarkstown, Ramapo town
	Fulton County, Pennsylvania*	##
	Multnomah County and the city of Portland, Oregon*	Gresham city, Portland city
	Douglas County, Nebraska**	Omaha city
	Franklin County, Ohio**	Columbus city-Franklin Country pt
	Harris and Fort Bend Counties (Houston, TX)**	Fort Bend County, Harris County, Houston city-Harris County pt, Houston city, Pasadena city
	Otero County, New Mexico**	Alamogordo city, Boles Acres CDP, Cloudcroft village, Hlloman AFB CDP, La Lux CDP, Mescalero CDP, Mescalero Apache Reservation, Tularosa village
	Broward County, Florida	Coral Springs city, Fort Lauderdale, Hollywood city, Pembroke Pines city
	Richland and Kershaw Counties, South Carolina	Richland County, Coumbia city-Richland County pt

Note: # The 1997 American Community Survey Profiles provide data for areas of 65,000 or more. The scope of these tables is limited to housing units, occupied and vacant, in six sites: Brevard County, Florida; Douglas County, Nebraska; Rockland County, New York; Franklin County, Ohio; Multnomah County, Oregon and the city of Portland, Oregon; and Fort Bend and Harris Counties, Texas.

Source: http://www.census.gov/acs/www/index_a.htm

Table 6 shows that the aggregations will permit a substantial increase in the geography for which tabulations are available. For example in Rockland County (New York) data is now tabulated for two new units Orangetown MCD with a population of 44,164 and Haverstraw MCD with a population of 34, 235.

TABLE 6
1996 -1997 COMBINED PROFILES: GEOGRAPHIC DATA AVAILABILITY

Florida	Brevard County, Melbourne city,| Merritt Island CDP, Palm Bay city, Titusville
New York	Rockland County,Clarkstown MCD, Haverstraw MCD, Orangetown MCD, |Ramapo MCD
Oregon	Multnomah County, Gresham city, Portland city
Pennsylva\nia	Fulton County

Source: http://www.census.gov/acs/www/index_c.htm

AMERICAN COMMUNITY SURVEY DATA - POVERTY AND SOCIAL VULNERABILITY

Like the census data, poverty data from the American Community Survey do not compare with poverty data arising from the Current Population Survey or the Survey of Income and Program Participations. At present, the American Community Survey poverty table is limited to the total population without racial or ethnic iterations. Ethnic and racial iterations are possible using the Public Users Microdata Sets.

The current ethnic, racial, language and foreign born tabulations available from the American Community Survey are rather basic. In the case of Hispanic origin, for example, the ACS tables currently show "Total Hispanics" and none of the traditional Hispanic origin subgroups (Mexican, Puerto Rican, Cuban, etc.). In the case of ancestry, 34 ancestries or groupings are shown, which is substantial. For the foreign born population, only the total foreign born is presented, and presentation of greater detail is problematic. Lastly, the language table is limited to language spoken at home. Once again, more complex tabulations can be produced with the Public User Microdata Sets for this survey. Over time, a

more traditional set of tabulations will arise as the survey moves into its implementation in 2003 and beyond.

This survey has all the key elements to build a continuity of data with the decennial census, but time is needed to build the utility of this data set. Additionally, it now falls on the subject matter specialists to design the proper set of tabulations to monitor ethnic poverty and an array of social vulnerability issues. Poverty and social vulnerability issues that could drive the table design process include: (1) poverty of ethnic new arrivals; (2) poverty of the ethnic aged; (3) poverty of ethnic youth; (4) language use and educational attainment; and (5) disabilities and the ethnic population, to suggest a few. However, tabulations must be designed judiciously to avoid slicing the data too thinly. The job is to build good data that can do some good for the populations at risk.

OTHER ETHNIC AND RACIAL ISSUES

As stated earlier, Census 2000 and the American Community Survey will be asking the same questions and employing to the greatest degree possible similar methodologies in coding, editing, etc. This is, in a sense, a foreshadowing of the ethnic and race data collection standardization that was mandated by the revision to the Office of Management and Budget's Federal Directive #15.

At present not all data collection activities of the U. S. Bureau of the Census use the same questions for the collection of race and ethnic data. A prime example is the largest household survey in the United States, the Current Population Survey. The question used in this survey to collect Hispanic origin data is closer to the census ancestry question than to the census Hispanic origin question. This lack of standardization is about to change.

The revision to Federal Directive #15 mandates uniform race and ethnic data collection by the year 2003. The Current Population Survey, for example, will test the new questions and question order in the summer of 2000 in a special race and ethnicity supplement.

However, along with the benefits of standardization, there are sacrifices. The old ethnic question in the Current Population Survey will be dropped. As stated previously, this question provided information much like the ancestry question. This type of data will soon be lost.

CONCLUSIONS

The planned production of census-like data from the American Community Survey has the potential to change the nature of intercenal data in the United States. Indeed, intercensal planning, evaluation and research will most likely be reshaped. However, in order to tap this potential, appropriate sets of data tabulation plans need to be developed.

Given the often predominant precarious social conditions of racial and ethnic groups, priority must be given to the development of tabulations that reflect the reality of these groups, and that are simultaneously useful to policy makers, planners, and social policy implementation agencies. The tabulations need to look at racial and ethnic groups in terms of poverty, disabilities, educations, place of birth, and year of entry to name a few.

Tabulations of ethnic poverty need the appropriate crosses to reveal the nature of poverty. Needed crosses, for example, include age (to determine the number of children and elderly in poverty), linguistic isolation(to detect populations that are deprived of services due to their inability to communicate), and year of entry (to disproportionate deprivation in a community due to its recent arrival).

New topics such as the caregiver/grandparenting questions need to be explored with appropriate ethnic and other data crosses to reveal the nature and dimensions of the issue. However, all topics, old and new, need judicious care to avoid slicing the data too thinly. Care is needed to avoid excess topic crosses, especially at low levels of geography. The planned aggregations of three and five years of data in the American Community Survey will go a long way in providing a solid base for tabulations at low levels of geography. A savvy and succinct mind is needed when faced with the dimensions of the American Community Survey; at full implementation, this survey will be active in all the counties in the United States.

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APPENDIX A

TABLE 1

PUBLISHED COUNTS FOR DETAILED ANCESTRY GROUPS: 1990

Alphabetic Order	Number of Groups	Name of Groups
A - B	20	Arcadian, Albanian, Arab (Egyptian, Iraqi, Jordanian, Lebanese, Palestinian, Syrian, Arab/Arabic, Other Arab), Armenian, Assyrian, Australian, Austrian, Basque, Belgian, Brazilian, British, Bulgarian
C - F	16	Canadian, Celtic, Croatian, Czech, Czechoslovakian, Danish, Dutch, Eastern European, English, Estonian, European, Finnish, French (except Basque), French Canadian
G - P	19	German, Greek, Guyanese, Hungarian, Icelander, Iranian, Irish, Israeli, Italian, Latvian, Lithuanian, Luxemburger, Macedonian, Maltese, Northern European, Norwegian, Pennsylvania German, Polish, Portuguese
Q - T	20	Romanian, Russian, Scandinavian, Scotch-Irish, Scottish, Serbian, Slavic, Slovak, Slovene, Subsaharan African (Cape Verdean, Ethiopian, Ghanian, Nigerian, African, Other Subsaharan African), Swedish, Swiss, Turkish
U - Z	15	Ukranian, United States or American, Welsh, West Indian (excluding Hispanic origin groups)[Bahamian, Barbadian, Belizean, British West Indian, Dutch West Indian, Haitian, Jamaican, Tridadian/Toboganian, West Indian, Other West Indian], Yugoslavian
Other ancestries	multiple	multiple

Note: Ancestry groups in brackets such as those following "Arab" have count information presented.
Source: U.S. Bureau of the Census, 1993, 1990 Census of Population Social and Economic Characteristics New York Section 1 of 3 (1990 CP-2-34), Table 137.

TABLE 2

REDUCED SET OF SPECIFIC ANCESTRY GROUPS: 1990

Arab
Austrian
Belgian
Canadian
Czech
Danish
Dutch
English
Finnish
French (except Basque)
French Canadian
German
Greek
Hungarian
Irish
Italian
Lithuanian
Norwegian
Polish
Portuguese
Romanian
Russian
Scotch-Irish
Scottish
Slovak
Subsaharan African
Swedish
Swiss
Ukrainian
United States or American
Welsh
West Indian (excluding Hispanic origin groups)
Yugoslavian
Other Ancestries

Source: U.S. Bureau of the Census, 1993, 1990 Census of Population Social and Economic Characteristics New York Section 2 of 3 (1990 CP-2-34)

APPENDIX B
1990 CENSUS SUBJECT MATTER CONCEPTS

Ancestry

The data on ancestry were derived from answers to questionnaire item 13, which was asked of a sample of persons. The question was based on self-identification; the data on ancestry represent self-classification by people according to the ancestry group(s) with which they most closely identify. Ancestry refers to a person's ethnic origin or descent, "roots," or heritage or the place of birth of the person or the person's parents or ancestors before their arrival in the United States. Some ethnic identities, such as "Egyptian" or "Polish" can be traced to geographic areas outside the United States, while other ethnicities such as "Pennsylvania Dutch" or "Cajun" evolved in the United States.

The intent of the ancestry question was not to measure the degree of attachment the respondent had to a particular ethnicity. For example, aresponse of "Irish" might reflect total involvement in an "Irish" community or only a memory of ancestors several generations removed from the individual.

The Census Bureau coded the responses through an automated review, edit, and coding operation. The open-ended write-in ancestry item was coded by subject-matter specialists into a numeric representation using a code list containing over 1,000 categories. The 1990 code list reflects the results of the Census Bureau's own research and consultations with many ethnic experts. Many decisions were made to determine the classification of responses. These decisions affected the grouping of the tabulated data. For example, the "Assyrian" category includes both responses of "Assyrian" and "Chaldean."

The ancestry question allowed respondents to report one or more ancestry groups. While a large number of respondents listed a single ancestry, the majority of answers included more than one ethnic entry. Generally, only the first two responses reported were coded in 1990. If a response was in terms of a dual ancestry, for example, Irish-English, the person was assigned two codes, in this case one for Irish and another for English.

However, in certain cases, multiple responses such as "French Canadian," "Scotch-Irish," "Greek Cypriote," and "Black Dutch" were assigned a single code reflecting their status as unique groups. If a person reported one of these unique groups in addition to another group, for example, "Scotch-Irish English," resulting in three terms, that person received one code for the unique group ("Scotch-Irish") and another one for the remaining group ("English"). If a person reported "English Irish French," only English and Irish were coded. Certain combinations of ancestries where the ancestry group is a part of another, such as "German-Bavarian," the responses were coded as a single ancestry using the smaller group ("Bavarian"). Also, responses such as "Polish-American" or "Italian-American" were coded and tabulated as a single entry ("Polish" or "Italian").

The Census Bureau accepted "American" as a unique ethnicity if it was given alone, with an ambiguous response, or with State names. If the respondent listed any other ethnic identity such as "Italian American," generally the "American" portion of the response was not coded. However, distinct groups such as "American Indian," "Mexican American," and "African American" were coded and identified separately because they represented groups who considered themselves different from those who reported as "Indian," "Mexican," or "African," respectively.

In all tabulations, when respondents provided an unacceptable ethnic identity (for example, an un codeable or unintelligible response such as "multi-national," "adopted," or "I have no idea"), the answer was included in "Ancestry not reported."

The tabulations on ancestry are presented using two types of data presentations--one used total persons as the base, and the other used total responses as the base. The following are categories shown in the two data presentations:

Presentation Based on Persons:

Single Ancestries Reported--Includes all persons who reported only one ethnic group. Included in this category are persons with multiple-term responses such as "Scotch-Irish" who are assigned a single code.

Multiple Ancestries Reported--Includes all persons who reported more than one group and were assigned two ancestry codes.

Ancestry Unclassified--Includes all persons who provided a response that could not be assigned an ancestry code because they provided nonsensical entries or religious responses.

Presentations Based on Responses:

Total Ancestries Reported--Includes the total number of ancestries reported and coded. If a person reported a multiple ancestry such as

"French Danish," that response was counted twice in the tabulations--once in the "French" category and again in the "Danish" category. Thus, the sum of the counts in this type of presentation is not the total population but the total of all responses.

First Ancestry Reported--Includes the first response of all persons who reported at least one codeable entry. For example, in this category, the count for "Danish" would include all those who reported only Danish and those who reported Danish first and then some other group.

Second Ancestry Reported--Includes the second response of all persons who reported a multiple ancestry. Thus, the count for "Danish" in this category includes all persons who reported Danish as the second response, regardless of the first response provided.

The Census Bureau identified hundreds of ethnic groups in the 1990 census. However, it was impossible to show information for every group in all census tabulations because of space constraints. Publications such as the 1990 CP-2, Social and Economic Characteristics and the 1990 CPH-3, Population and Housing Characteristics for Census Tracts and Block Numbering Areas reports show a limited number of groups based on the number reported and the advice received from experts. A more complete distribution of groups is presented in the 1990 Summary Tape File 4, supplementary reports, and a special subject report on ancestry. In addition, groups identified specifically in the questions on race and Hispanic origin (for example, Japanese, Laotian, Mexican, Cuban, and Spaniard), in general, are not shown separately in ancestry tabulations.

Limitation of the Data--Although some experts consider religious affiliation a component of ethnic identity, the ancestry question was not designed to collect any information concerning religion. The Bureau of the Census is prohibited from collecting information on religion. Thus, if a religion was given as an answer to the ancestry question, it was coded as an "Other" response.

Comparability--A question on ancestry was first asked in the 1980 census. Although there were no comparable data prior to the 1980 census, related information on ethnicity was collected through questions on parental birthplace, own birthplace, and language which were included in previous censuses. Unlike other census questions, there was no imputation for nonresponse to the ancestry question.

In 1990, respondents were allowed to report more than one ancestry group; however, only the first two ancestry groups identified were coded. In 1980, the Census Bureau attempted to code a third ancestry for selected triple-ancestry responses.

New categories such as "Arab" and "West Indian" were added to the 1990 question to meet important data needs. The "West Indian" category excluded "Hispanic" groups such as "Puerto Rican" and "Cuban" that were identified primarily through the question on Hispanic origin. In 1990, the ancestry group, "American" is recognized and tabulated as a unique ethnicity. In 1980, "American" was tabulated but included under the category "Ancestry not specified."

A major improvement in the 1990 census was the use of an automated coding system for ancestry responses. The automated coding system used in the 1990 census greatly reduced the potential for error associated with a clerical review. Specialists with a thorough knowledge of the subject matter reviewed, edited, coded, and resolved inconsistent or incomplete responses.

Source: http://www.census.gov/td/stf3/append_b.html#ANCESTRY

Citizenship

The data on citizenship were derived from answers to questionnaire item 9, which was asked of a sample of persons.

Citizen--Persons who indicated that they were native-born and foreign-born persons who indicated that they have become naturalized. (For more information on native and foreign born, see the discussion under "Place of Birth.")

There are four categories of citizenship: (1) born in the United States, (2) born in Puerto Rico, Guam, the Virgin Islands of the United States, or the Commonwealth of the Northern Mariana Islands, (3) born abroad of American parents, and (4) citizen by naturalization.

Naturalized Citizen--Foreign-born persons who had completed the naturalization process at the time of the census and upon whom the rights of citizenship had been conferred.

Not a Citizen--Foreign-born persons who were not citizens, including persons who had begun but not completed the naturalization process at the time of the census.

Limitation of the Data--Evaluation studies completed after previous censuses indicated that some persons may have reported themselves as citizens although they had not yet attained the status.

Comparability--Similar questions on citizenship were asked in the censuses of 1820, 1830, 1870, 1890 through 1950, 1970, and 1980. The 1980 question was asked of a sample of the foreign-born population. In 1990, both native and foreign-born persons who received the long-form questionnaire were asked to respond to the citizenship question.

Source: http://www.census.gov/td/stf3/append_b.html#CITIZENSHIP

Hispanic Origin

The data on Spanish/Hispanic origin were derived from answers to questionnaire item 7, which was asked of all persons. Persons of Hispanic origin are those who classified themselves in one of the specific Hispanic origin categories listed on the questionnaire--"Mexican," "Puerto Rican," or "Cuban"--as well as those who indicated that they were of "other Spanish/Hispanic" origin. Persons of "Other Spanish/Hispanic" origin are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic, or they are persons of Hispanic origin identifying themselves generally as Spanish, Spanish-American, Hispanic, Hispano, Latino, and so on. Write-in responses to the "other Spanish/Hispanic" category were coded only for sample data.

Origin can be viewed as the ancestry, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. Persons of Hispanic origin may be of any race.

Some tabulations are shown by the Hispanic origin of the householder. In all cases where households, families, or occupied housing units are classified by Hispanic origin, the Hispanic origin of the householder is used. (See the discussion of householder under "Household Type and Relationship.")

During direct interviews conducted by enumerators, if a person could not provide a single origin response, he or she was asked to select, based on self-identification, the group which best described his or her origin or descent. If a person could not provide a single group, the origin of the person's mother was used. If a single group could not be provided for the person's mother, the first origin reported by the person was used.

If any household member failed to respond to the Spanish/Hispanic origin question, a response was assigned by the computer according to the reported entries of other household members by using specific rules of precedence of household relationship. In the processing of sample questionnaires, responses to other questions on the questionnaire, such as ancestry and place of birth, were used to assign an origin before any reference was made to the origin reported by other household members. If an origin was not entered for any household member, an origin was assigned from another household according to the race of the householder. This procedure is a variation of the general imputation process described in Appendix C, Accuracy of the Data.

Comparability--There may be differences between the total Hispanic origin population based on 100-percent tabulations and sample tabulations. Such differences are the result of sampling variability, nonsampling error, and more extensive edit procedures for the Spanish/Hispanic origin item on the sample questionnaires. (For more information on sampling variability and nonsampling error, see Appendix C, Accuracy of the Data.)

The 1990 data on Hispanic origin are generally comparable with those for the 1980 census. However, there are some differences in the format of the Hispanic origin question between the two censuses. For 1990, the word "descent" was deleted from the 1980 wording. In addition, the term "Mexican-Amer." used in 1980 was shortened further to "Mexican-Am." to reduce misreporting (of "American") in this category detected in the 1980 census. Finally, the 1990 question allowed those who reported as "other Spanish/Hispanic" to write in their specific Hispanic origin group.

Misreporting in the "Mexican-Amer." category of the 1980 census item on Spanish/Hispanic origin may affect the comparability of 1980 and 1990 census data for persons of Hispanic origin for certain areas of the country. An evaluation of the 1980 census item on Spanish/Hispanic origin indicated that there was misreporting in the Mexican origin category by White and Black persons in certain areas. The study results showed evidence that the misreporting occurred in the South (excluding Texas), the Northeast (excluding the New York City area), and a few States in the Midwest Region. Also, results based on available data suggest that the impact of possible misreporting of Mexican origin in the 1980 census was severe in those portions of

the above-mentioned regions where the Hispanic origin population was generally sparse. However, national 1980 census data on the Mexican origin population or total Hispanic origin population at the national level was not seriously affected by the reporting problem. (For a more detailed discussion of the evaluation of the 1980 census Spanish/Hispanic origin item, see the 1980 census Supplementary Reports.)

The 1990 and 1980 census data on the Hispanic population are not directly comparable with 1970 Spanish origin data because of a number of factors: (1) overall improvements in the 1980 and 1990 censuses, (2) better coverage of the population, (3) improved question designs, and (4) an effective public relations campaign by the Census Bureau with the assistance of national and community ethnic groups.

Specific changes in question design between the 1980 and 1970 censuses included the placement of the category "No, not Spanish/Hispanic" as the first category in that question. (The corresponding category appeared last in the 1970 question.) Also, the 1970 category "Central or South American" was deleted because in 1970 some respondents misinterpreted the category; furthermore, the designations "Mexican-American" and "Chicano" were added to the Spanish/Hispanic origin question in 1980. In the 1970 census, the question on Spanish origin was asked of only a 5-percent sample of the population.

Source: http://www.census.gov/td/stf3/append_b.html#HISPANIC

Language Spoken at Home

Data on language spoken at home were derived from the answers to questionnaire items 15a and 15b, which were asked of a sample of persons born before April 1, 1985. Instructions mailed with the 1990 census questionnaire stated that a respondent should mark "Yes" in question 15a if the person sometimes or always spoke a language other than English at home and should not mark "Yes" if a language was spoken only at school or if speaking was limited to a few expressions or slang. For question 15b, respondents were instructed to print the name of the non-English language spoken at home. If the person spoke more than one language other than English, the person was to report the language spoken more often or the language learned first.

The cover of the census questionnaire included information in Spanish which provided a telephone number for respondents to call to request a census questionnaire and instructions in Spanish. Instruction guides were also available in 32 other languages to assist enumerators who encountered households or respondents who spoke no English.

Questions 15a and 15b referred to languages spoken at home in an effort to measure the current use of languages other than English. Persons who knew languages other than English but did not use them at home or who only used them elsewhere were excluded. Persons who reported speaking a language other than English at home may also speak English; however, the questions did not permit determination of the main or dominant language of persons who spoke both English and another language. (For more information, see discussion below on "Ability to Speak English.")

For persons who indicated that they spoke a language other than English at home in question 15a, but failed to specify the name of the language in question 15b, the language was assigned based on the language of other speakers in the household; on the language of a person of the same Spanish origin or detailed race group living in the same or a nearby area; or on a person of the same ancestry or place of birth. In all cases where a person was assigned a non-English language, it was assumed that the language was spoken at home. Persons for whom the name of a language other than English was entered in question 15b, and for whom question 15a was blank were assumed to speak that language at home.

The write-in responses listed in question 15b (specific language spoken) were transcribed onto computer files and coded into more than 380 detailed language categories using an automated coding system. The automated procedure compared write-in responses reported by respondents with entries in a computer dictionary, which initially contained approximately 2,000 language names. The dictionary was updated with a large number of new names, variations in spelling, and a small number of residual categories. Each write-in response was given a numeric code that was associated with one of the detailed categories in the dictionary. If the respondent listed more than one non-English language, only the first was coded.

The write-in responses represented the names people used for languages they speak. They may not match the names or categories used by linguists. The sets of categories used are sometimes geographic and sometimes linguistic. Figure 1 provides an illustration of the content of the classification schemes used to present language data. For more information, write to the Chief, Population Division, U.S. Bureau of the Census, Washington, DC 20233.

Household Language--In households where one or more persons (age 5 years old or over) speak a language other than English, the household language assigned to all household members is the non-English language spoken by the first person with a non-English language in the following order: householder, spouse, parent, sibling, child, grandchild, other relative, stepchild, unmarried partner, housemate or roommate, roomer, boarder, or foster child, or other nonrelative. Thus, persons who speak only English may have a non-English household language assigned to them in tabulations of persons by household language.

FIGURE 1

**FOUR- AND TWENTY-FIVE-GROUP CLASSIFICATIONS OF 1990 CENSUS
LANGUAGES SPOKEN AT HOME WITH ILLUSTRATIVE EXAMPLES**

Four-Group Classification	Twenty-Five-Group Classification	Examples
Spanish	Spanish	Spanish, Ladino
Other Indo European	French	French, Cajun, French Creole
	Italian	
	Portuguese	
	German	
	Yiddish	
	Other West Germanic	Afrikaans, Dutch, Pennsylvania Dutch
	Scandanavian	Danish, Norwegian, Swedish
	Polish	
	Russian	
	South Slavic	Serbocroatian, Bulgarian, Macedonian, Slovene
	Other Slavic	Czech, Slovak, Ukranian
	Greek	
	Indic	Hindi, Bengali, Gujarathi, Punjabi, Romany, Sinhalese
	Other Indo European, not elsewhere classified	Armenian, Gaelic, Lithuanian, Persian
Languages of Asia and the Pacific	Chinese	
	Japanese	
	Mon-Khmer	Cambodian
	Tagalog	
	Korean	
	Vietnamese	
	Other languages(part)	Chamorro, Dravidian Languages, Hawaiian, Ilocano, Thai, Turkish
All other languages	Arabic	
	Hungarian	
	Native North American languages	
	Other languages (part)	Amharic, Syriac, Finnish, Hebrew, Languages of Central and South America, Other Languages of Africa

Ability to Speak English--Persons 5 years old and over who reported that they spoke a language other than English in question 15a were also asked in question 15c to indicate their ability to speak English based on one of the following categories: "Very well," "Well," "Not well," or "Not at all."

The data on ability to speak English represent the person's own perception about his or her own ability or, because census questionnaires are usually completed by one household member, the responses may represent the perception of another household member. The instruction guides and questionnaires that were mailed to households did not include any information on how to interpret the response categories in question 15c.

Persons who reported that they spoke a language other than English at home but whose ability to speak English was not reported, were assigned the English-language ability of a randomly selected person of the same age, Spanish origin, nativity and year of entry, and language group.

Linguistic Isolation-- A household in which no person age 14 years or over speaks only English and no person age 14 years or over who speaks a language other than English speaks English "Very well" is classified as "linguistically isolated." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under age 14 years who may speak only English.

Limitation of the Data--Persons who speak a language other than English at home may have first learned that language at school. However, these persons would be expected to indicate that they spoke English "Very well." Persons who speak a language other than English, but do not do so at home, should have been reported as not speaking a language other than English at home.

The extreme detail in which language names were coded may give a false impression of the linguistic precision of these data. The names used by speakers of a language to identify it may reflect ethnic, geographic, or political affiliations and do not necessarily respect linguistic distinctions. The categories shown in the tabulations were chosen on a number of criteria, such as information about the number of speakers of each language that might be expected in a sample of the United States population.

Comparability--Information on language has been collected in every census since 1890. The comparability of data among censuses is limited by changes in question wording, by the subpopulations to whom the question was addressed, and by the detail that was published.

The same question on language was asked in the 1980 and 1990 censuses. This question on the current language spoken at home replaced the questions asked in prior censuses on mother tongue; that is, the language other than English spoken in the person's home when he or she was a child; one's first language; or the language spoken before immigrating to the United States. The censuses of 1910-1940, 1960 and 1970 included questions on mother tongue. A change in coding procedure from 1980 to 1990 should have improved accuracy of coding and may affect the number of persons reported in some of the 380 plus categories. It should not greatly affect the 4-group or 25- group lists. In 1980, coding clerks supplied numeric codes for the written entries on each questionnaire using a 2,000 name reference list. In 1990 written entries were transcribed to a computer file and matched to a computer dictionary which began with the 2,000 name list, but expanded as unmatched names were referred to headquarters specialists for resolution.

The question on ability to speak English was asked for the first time in 1980. In tabulations from 1980, the categories "Very well" and "Well" were combined. Data from other surveys suggested a major difference between the category "Very well" and the remaining categories. In tabulations showing ability to speak English, persons who reported that they spoke English "Very well" are presented separately from persons who reported their ability to speak English as less than "Very well."

Source: http://www.census.gov/td/stf3/append_b.html#LANGUAGE

Place of Birth

The data on place of birth were derived from answers to questionnaire item 8, which was asked on a sample basis. The place-of-birth question asked respondents to report the U.S. State, commonwealth or territory, or the foreign country where they were born. Persons born outside the United States were asked to report their place of birth according to current international boundaries. Since numerous changes in boundaries of foreign countries have occurred in the last century, some persons may have reported their place of birth in terms of boundaries that existed at the time of their birth or emigration, or in accordance with their own national preference.

Persons not reporting place of birth were assigned the birthplace of another family member or were allocated the response of another person with similar characteristics. Persons allocated as foreign born were not assigned a specific country of birth but were classified as "Born abroad, country not specified."

Nativity--Information on place of birth and citizenship were used to classify the population into two major categories: native and foreign born. When information on place of birth was not reported, nativity was assigned on the basis of answers to citizenship, if reported, and other characteristics.

Native--Includes persons born in the United States, Puerto Rico, or an outlying area of the United States. The small number of persons who were born in a foreign country but have at least one American parent also are included in this category.

The native population is classified in the following groups: persons born in the State in which they resided at the time of the census; persons born in a different State, by region; persons born in Puerto Rico or an outlying area of the U.S.; and persons born abroad with at least one American parent.

Foreign Born--Includes persons not classified as "Native." Prior to the 1970 census, persons not reporting place of birth were generally classified as native.

The foreign-born population is shown by selected area, country, or region of birth: the places of birth shown in data products were selected based on the number of respondents who reported that area or country of birth.

Comparability--Data on the State of birth of the native population have been collected in each census beginning with that of 1850. Similar data were shown in tabulations for the 1980 census and other recent censuses. Nonresponse was allocated in a similar manner in 1980; however, prior to 1980, nonresponse to the place of birth question was not allocated. Prior to the 1970 census, persons not reporting place of birth were generally classified as native.

The questionnaire instruction to report mother's State of residence instead of the person's actual State of birth (if born in a hospital in a different State) was dropped in 1990. Evaluation studies of 1970 and 1980 census data demonstrated that this instruction was generally either ignored or misunderstood.

Since the hospital and the mother's residence is in the same State for most births, this change may have a slight effect on State of birth data for States with large metropolitan areas that straddle State lines.

Poverty Status of Househholds in 1989

The data on poverty status of households were derived from answers to the income questions. The income items were asked on a sample basis.

Households are classified below the poverty level when the total 1989 income of the family or of the nonfamily householder is below the appropriate poverty threshold. The income of persons living in the household who are unrelated to the householder is not considered when determining the poverty status of a household, nor does their presence affect the household size in determining the appropriate poverty threshold. The poverty thresholds vary depending upon three criteria: size of family, number of children, and age of the family householder or unrelated individual for one and two-persons households. (For more information, see the discussion of "Poverty Status in 1989" and "Income in 1989" under Population Characteristics.)

Poverty Status in 1989

The data on poverty status were derived from answers to the same questions as the income data, questionnaire items 32 and 33. (For more information, see the discussion under "Income in 1989.") Poverty statistics presented in census publications were based on a definition originated by the Social Security Administration in 1964 and subsequently modified by Federal interagency committees in 1969 and 1980 and prescribed by the Office of Management and Budget in Directive 14 as the standard to be used by Federal agencies for statistical purposes.

At the core of this definition was the 1961 economy food plan, the least costly of four nutritionally adequate food plans designed by the Department of Agriculture. It was determined from the Agriculture Department's 1955 survey of food consumption that families of three or more persons spend approximately one-third of their income on food; hence, the poverty level for these families was set at three times the cost of the economy food plan. For smaller families and persons living alone, the cost of the economy food plan was multiplied by factors that were slightly higher to compensate for the relatively larger fixed expenses for these smaller households.

The income cutoffs used by the Census Bureau to determine the poverty status of families and unrelated individuals included a set of 48 thresholds arranged in a two-dimensional matrix consisting of family size (from one person to nine or more persons) cross-classified by presence and number of family members under 18 years old (from no children present to eight or more children present). Unrelated individuals and two-person families were further differentiated by age of the householder (under 65 years old and 65 years old and over).

The total income of each family or unrelated individual in the sample was tested against the appropriate poverty threshold to determine the poverty status of that family or unrelated individual. If the total income was less than the corresponding cutoff, the family or unrelated individual was classified as "below the poverty level." The number of persons below the poverty level was the sum of the number of persons in families with incomes below the poverty level and the number of unrelated individuals with incomes below the poverty level.

The poverty thresholds are revised annually to allow for changes in the cost of living as reflected in the Consumer Price Index. The average poverty threshold for a family of four persons was $12,674 in 1989. (For more information, see table A below.) Poverty thresholds were applied on a national basis and were not adjusted for regional. State or local variations in the cost of living. For a detailed discussion of the poverty definition, see U.S. Bureau of the Census, Current Population Reports, Series P-60, No. 171, Poverty in the United States: 1988 and 1989.

TABLE A
POVERTY THRESHOLDS IN 1989 BY SIZE OF FAMILY AND NUMBER OF
RELATED CHILDREN UNDER 18 YEARS

Size of Family Unit	Weight average thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelatedindividual)	$6,310									
Under 65 yrs65	6 451	$6,451								
& over	5,947	5,947								
Two persons	8,076									
Householder under 65 yrs.	8,343	8,303	$8,547							
Householder 65 yrs. & over	7,501	7,495	8,515							
Three persons	9,885	9,699	9,98	$9,990						
Four persons	12,674	12,790	12,999	12,575	$12,619					
Five persons	14,990	15,424	15,648	15,169	14,798	$14,572				
Six persons	16,921	17,740	17,811	17,444	17,092	16,569	$16,259			
Seven persons	19,162	20,412	20,540	20,101	19,794	19,224	18,558	$17,828		
Eight persons	21,328	22,830	23,031	22,617	22,253	21,738	21,084	2 0,403	$20,230	
Nine or ore persons	25,480	27,463	27,596	27,229	26,921	26,415	25,719	25,089	24,933	$23,973

Persons for Whom Poverty Status is Determined-- Poverty status was determined for all persons except institutionalized persons, persons in military group quarters and in college dormitories, and unrelated individuals under 15 years old. These groups also were excluded from the denominator when calculating poverty rates.

Specified Poverty Levels--Since the poverty levels currently in use by the Federal Government do not meet all the needs of data users, some of the data are presented for alternate levels. These specified poverty levels are obtained by multiplying the income cutoffs at the poverty level by the appropriate factor. For example, the average income cutoff at 125 percent of poverty level was $15,843 ($12,674 x 1.25) in 1989 for a family of four persons.

Weighted Average Thresholds at the Poverty Level--The average thresholds shown in the first column of table A are weighted by the presence and number of children. For example, the weighted average threshold for a given family size is obtained by multiplying the threshold for each presence and number of children category within the given family size by the number of families in that category. These products are then aggregated across the entire range of presence and number of children categories, and the aggregate is divided by the total number of families in the group to yield the weighted average threshold at the poverty level for that family size.

Since the basic thresholds used to determine the poverty status of families and unrelated individuals are applied to all families and unrelated individuals, the weighted average poverty thresholds are derived using all families and unrelated individuals rather than just those classified as being below the poverty level. To obtain the weighted poverty thresholds for families and unrelated individuals below alternate poverty levels, the weighted thresholds shown in table A may be multiplied directly by the appropriate factor. The weighted average thresholds presented in the table are based on the March 1990 Current Population Survey. However, these thresholds would not differ significantly from those based on the 1990 census.

Income Deficit--Represents the difference between the total income of families and unrelated individuals below the poverty level and their respective poverty thresholds. In computing the income deficit, families reporting a net income loss are assigned zero dollars and for such cases the deficit is equal to the poverty threshold.

This measure provided an estimate of the amount which would be required to raise the incomes of all poor families and unrelated individuals to their respective poverty thresholds. The income deficit is thus a measure of the degree of impoverishment of a family or unrelated individual. However,

caution must be used in comparing the average deficits of families with different characteristics. Apparent differences in average income deficits may, to some extent, be a function of differences in family size.

Mean Income Deficit--Represents the amount obtained by dividing the total income deficit of a group below the poverty level by the number of families (or unrelated individuals) in that group.

Comparability--The poverty definition used in the 1990 and 1980 censuses differed slightly from the one used in the 1970 census. Three technical modifications were made to the definition used in the 1970 census as described below:

1. The separate thresholds for families with a female householder with no husband present and all other families were eliminated. For the 1980 and 1990 censuses, the weighted average of the poverty thresholds for these two types of families was applied to all types of families, regardless of the sex of the householder.

2. Farm families and farm unrelated individuals no longer had a set of poverty thresholds that were lower than the thresholds applied to nonfarm families and unrelated individuals. The farm thresholds were 85 percent of the corresponding levels for nonfarm families in the 1970 census. The same thresholds were applied to all families and unrelated individuals regardless of residence in 1980 and 1990.

3. The thresholds by size of family were extended from seven or more persons in 1970 to nine or more persons in 1980 and 1990.

These changes resulted in a minimal increase in the number of poor at the national level. For a complete discussion of these modifications and their impact, see the Current Population Reports, Series P-60, No. 133.

The population covered in the poverty statistics derived from the 1980 and 1990 censuses was essentially the same as in the 1970 census. The only difference was that in 1980 and 1990, unrelated individuals under 15 years old were excluded from the poverty universe, while in 1970, only those under 14 years old were excluded. The poverty data from the 1960 census excluded all persons in group quarters and included all unrelated individuals regardless of age. It was unlikely that these differences in population coverage would have had significant impact when comparing the poverty data for persons since the 1960 censuses.

Current Population Survey--Because of differences in the questionnaires and data collection procedures, estimates of the number of persons below the poverty level by various characteristics from the 1990 census may differ from those reported in the March 1990 Current Population Survey.

Source: http://www.census.gov/td/stf3/append_b.html#POVERTY

Year of Entry

The data on year of entry were derived from answers to questionnaire item 10, which was asked of a sample of persons. The question, "When did this person come to the United States to stay?" was asked of persons who indicated in the question on citizenship that they were not born in the United States. (For more information, see the discussion under "Citizenship.")

The 1990 census questions, tabulations, and census data products about citizenship and year of entry include no reference to immigration. All persons who were born and resided outside the United States before becoming residents of the United States have a date of entry. Some of these persons are U.S. citizens by birth (e.g., persons born in Puerto Rico or born abroad of American parents). To avoid any possible confusion concerning the date of entry of persons who are U.S. citizens by birth, the term, "year of entry" is used in this report instead of the term "year of immigration."

Limitation of the Data--The census questions on nativity, citizenship, and year of entry were not designed to measure the degree of permanence of residence in the United States. The phrase, "to stay" was used to obtain the year in which the person became a resident of the United States.

Although the respondent was directed to indicate the year he or she entered the country "to stay," it was difficult to ensure that respondents interpreted the phrase correctly.

Comparability--A question on year of entry, (alternately called "year of immigration") was asked in each decennial census from 1890 to 1930, 1970, and 1980. In 1980, the question on year of entry included six arrival time intervals. The number of arrival intervals was expanded to ten in 1990. In 1980, the question on year of entry was asked only of the foreign-born population. In 1990, all persons who responded to the long-form questionnaire and were not born in the United States were to complete the question on year of entry.

Source: http://www.census.gov/td/stf3/append_b.html#YEAR

APPENDIX C
AMERICAN COMMUNITY SURVEY SUBJECT MATTER CONCEPTS

Ancestry

The data on ancestry were derived from answers to questionnaire item 12. The question was based on self-identification; the data on ancestry represent self-classification by people according to the ancestry group(s) with which they most closely identify. Ancestry refers to a persons ethnic origin or descent, "roots," or heritage or the place of birth of the person or the person's parents or ancestors before their arrival in the United States. Some ethnic identities, such as "Egyptian" or "Polish" can be traced to geographic areas outside the United States, while other ethnicities such as "Pennsylvania Dutch" or "Cajun" evolved in the United States.

The intent of the ancestry question was not to measure the degree of attachment the respondent had to a particular ethnicity. For example, a response of "Irish" might reflect total involvement in an "Irish" community or only a memory of ancestors several generations removed from the individual.

The Census Bureau coded the responses through an automated review, edit, and coding operation. The open-ended write-in ancestry item was coded by subject-matter specialists into a numeric representation using a code list containing over 1,000 categories. The code list reflects the results of the Census Bureau's own research and consultations with many ethnic experts. Many decisions were made to determine the classification of responses. These decisions affected the grouping of the tabulated data. For example, the "Assyrian" category includes both responses of "Assyrian" and "Chaldean."

The ancestry question allowed respondents to report one or more ancestry groups. Generally, only the first two responses reported were coded. If a response was in terms of a dual ancestry, for example, Irish-English, the person was assigned two codes, in this case one for Irish and another for English.

However, in certain cases, multiple responses such as "French Canadian," "Scotch-Irish," "Greek Cypriote," and "Black Dutch" were assigned a single code reflecting their status as unique groups. If a person reported one of these unique groups in addition to another group, for example, "Scotch-Irish English," resulting in three terms, that person received one code for the unique group ("Scotch-Irish") and another one for the remaining group ("English"). If a person reported "English Irish French," only English and Irish were coded. Certain combinations of ancestries where the ancestry group is a part of another, such as "German-Bavarian," the responses were coded as a single ancestry using the smaller group ("Bavarian"). Also, responses such as "Polish-American or "Italian-American" were coded and tabulated as a single entry ("Polish" or "Italian").

The Census Bureau accepted "American" as a unique ethnicity if it was given alone, with an ambiguous response, or with State names. If the respondent listed any other ethnic identity such as "Italian American," generally the "American" portion of the response was not coded. However, distinct groups such as "American Indian," "Mexican American," and "African American" were coded and identified separately because they represented groups who considered themselves different from those who reported as "Indian," "Mexican," or "African," respectively.

In all tabulations, when respondents provided an unacceptable ethnic identity (for example, an un codeable or unintelligible response such as "multi-national," "adopted," or "I have no idea"), the answer was included in "Ancestry not reported."

The tabulations on ancestry use two types of data presentations -- one used total persons as the base, and the other used total responses as the base. The following are categories shown in the two data presentations:

Presentation Based on Persons:

> Single Ancestries Reported--Includes all persons who reported only one ethnic group. Included in this category are persons with multiple-term responses such as "Scotch-Irish" who are assigned a single code.

> Multiple Ancestries Reported--Includes all persons who reported more than one group and were assigned two ancestry codes.

> Ancestry Unclassified--Includes all persons who provided a response that could not be assigned an ancestry code because they provided nonsensical entries or religious responses.

Presentations Based on Responses:

> Total Ancestries Reported--Includes the total number of ancestries reported and coded. If a person reported a multiple ancestry such as "French Danish," that response was counted twice in the tabulations--once in the "French" category and again in the

"Danish" category. Thus, the sum of the counts in this type of presentation is not the total population but the total of all responses.

First Ancestry Reported--Includes the first response of all persons who reported at least one codeable entry. For example, in this category, the count for "Danish" would include all those who reported only Danish and those who reported Danish first and then some other group.

Second Ancestry Reported--Includes the second response of all persons who reported a multiple ancestry. Thus, the count for "Danish" in this category includes all persons who reported Danish as the second response, regardless of the first response provided.

Limitation of the Data--Although some experts consider religious affiliation a component of ethnic identity, the ancestry question was not designed to collect any information concerning religion. The Bureau of the Census is prohibited from collecting information on religion. Thus, if a religion was given as an answer to the ancestry question, it was coded as an "Other" response.

Comparability--The ACS question was the same as 1990 decennial census. The system for coding the responses differed slightly from that used in the 1990 decennial census. The change involved consistency checks with answers to other questions when the write-in response to ancestry was "Indian."

Source: http://www.census.gov/acs/www/index_b.htm

Citizenship

The data on citizenship were derived from answers to questionnaire item 8.

Citizen--Persons who indicated that they were born in the United States or born abroad of American parents, or from Puerto Rico, etc., and foreign-born persons who indicated that they have become naturalized citizens. (For more information on native and foreign born, see the discussion under "Place of Birth.")

There are two categories of citizenship: (1) Native born: born in the United States, Puerto Rico, Guam, the Virgin Islands of the United States, or the Commonwealth of the Northern Mariana Islands, or born abroad of American parents, and (2) citizen by naturalization.

Naturalized Citizen--Foreign-born persons who had completed the naturalization process at the time of the ACS and upon whom the rights of citizenship had been conferred.

Not a Citizen--Foreign-born persons who were not citizens, including persons who had begun but not completed the naturalization process at the time of the ACS.

Comparability--The question for the ACS and the decennial census are identical. However, there is one variation in the response category for Americans born abroad. The decennial response category was "Yes, born abroad of American parent or parents", while the ACS response category was "Yes, born abroad of American parent(s)"

Source: http://www.census.gov/acs/www/index_b.htm

Hispanic Origin

The data on Spanish/Hispanic/Latino origin were derived from answers to questionnaire item 5. Persons of Hispanic origin are those who classified themselves in one of the specific Hispanic origin categories listed on the questionnaire-- "Mexican," "Puerto Rican," or "Cuban"--as well as those who indicated that they were of "other Spanish/Hispanic/Latino" origin. Persons of "Other Spanish/Hispanic/Latino" origin are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic, or they are persons of Hispanic origin identifying themselves generally as Spanish, Spanish-American, Hispanic, Hispano, Latino, and so on. Write-in responses to the "other Spanish/Hispanic/Latino" category were coded.

Origin can be viewed as the ancestry, nationality group, lineage, or country of birth of the person or the persons parents or ancestors before their arrival in the United States. Persons of Hispanic origin may be of any race.

Some tabulations are shown by the Hispanic origin of the householder. In all cases where households, families, or occupied housing units are classified by Hispanic origin, the Hispanic origin of the householder is used. (See the discussion of householder under "Household Type and Relationship.")

During interviews, persons were asked to select one category, based on self-identification, the group which best described his or her origin or descent. If a person could not provide a single group, the origin of the person's mother was used. If a single group could not be provided for the person's mother, the first origin reported by the person was used.

Comparability--The ACS questionnaire and the 1990 decennial census questionnaire differed slightly. The decennial questionnaire item asked "Is this person of Spanish/Hispanic origin?" , while the ACS questionnaire asks "Is this person Spanish/Hispanic/Latino?". Also, the decennial questionnaire listed several examples of possible groups as "Other Spanish/Hispanic". The ACS questionnaire does not.

Source: http://www.census.gov/acs/www/index_b.htm

Language Spoken at Home

Data on language spoken at home were derived from the answers to questionnaire items 14a and 14b, which were asked of persons 5 years old and older. Instructions mailed with the ACS questionnaire stated that a respondent should mark "Yes" in question 14a if the person sometimes or always spoke a language other than English at home and should NOT mark "Yes" if a language was spoken only at school or if speaking was limited to a few expressions or slang. For question 14b, respondents were instructed to print the name of the non-English language spoken at home. If the person spoke more than one language other than English, the person was to report the language spoken most often or the language learned first.

Questions 14a and 14b referred to a language spoken at home in an effort to measure the current use of a language other than English. Persons who knew languages other than English but did not use them at home or who only used them elsewhere were excluded. Persons who reported speaking a language other than English at home may also speak English; however, the questions did not permit determination of the primary language of persons who spoke both English and another language.

Ability to Speak English--Persons 5 years old and over who reported that they spoke a language other than English in question 14a were also asked to indicate their ability to speak English based on one of the following categories: "Very well," "Well," "Not well," or "Not at all," in question 14c.

The data on ability to speak English represent the persons own perception of his or her own ability or, because ACS questionnaires are usually completed by one household member, the responses may represent the perception of another household member.

Comparability--The ACS questions and coding procedures were the same as the 1990 decennial census.

Source: http://www.census.gov/acs/www/index_b.htm

Place of Birth

The data on place of birth were derived from answers to questionnaire item 7, which asked respondents to report the U.S. State, commonwealth or territory, or the foreign country where they were born. Persons born outside the United States were asked to report their place of birth according to current international boundaries. Since numerous changes in boundaries of foreign countries have occurred in the last century, some persons may have reported their place of birth in terms of boundaries that existed at the time of their birth or emigration, or in accordance with their own national preference.

Nativity--Information on place of birth and citizenship were used to classify the population into two major categories: native and foreign born. Natives include persons born in the United States, Puerto Rico, or an outlying area of the United States, and persons who were born in a foreign country but have at least one American parent.

The native population is classified in the following groups: persons born in the State in which they resided at the time of the census; persons born in a different State, by region; persons born in Puerto Rico or an outlying area of the U.S.; and persons born abroad with at least one American parent. Persons not classified as "Native" are "foreign born."

The foreign-born population is shown by selected area, country, or region of birth: the places of birth shown in data products were selected based on the number of respondents who reported that area or country of birth.

Comparability--Same as 1990 decennial census.

Source: http://www.census.gov/acs/www/index_b.htm

Poverty Status for the Past 12 Months

The poverty status data were derived from answers to the same questions as the income data, questionnaire items 40 and 41. (For more information, see the discussion under "Income.") Poverty statistics presented in American Community Survey publications were based on the Social Security Administration 1964 definition, which was subsequently modified by federal interagency committees in 1969 and 1980. At the core of this definition was the 1961 economy food plan, the least costly of four nutritionally adequate food plans designed by the Department of Agriculture. It was determined from the Agriculture Department 1955 survey of food consumption that families of three or more persons spend approximately one-third of their income on food; hence, the poverty level for these families was set at three times the cost of the economy food plan. For smaller families and persons living alone, the cost of the economy food plan was multiplied by slightly higher factors to compensate for the relatively larger fixed expenses for these smaller households.

In determining the poverty status of families and unrelated individuals, the Census Bureau used income cutoffs which included a set of 48 thresholds arranged in a two-dimensional matrix consisting of family size (from one person to nine or more persons) cross-classified by presence and number of children (from no children present to eight or more children present). Unrelated individuals and two-person families were further differentiated by age of the reference person (UP) (under 65 years old and 65 years old and over). The poverty thresholds in the ACS are revised monthly to allow for changes in the cost of living as reflected in the Consumer Price Index. Poverty thresholds were applied on a national basis and were not adjusted for regional, State or local variations in the cost of living.

The total income in the previous twelve months of each family or unrelated individual in the sample was compared to the appropriate poverty threshold to determine the poverty status of that family or unrelated individual. If the total income was less than the corresponding threshold, the family or unrelated individual was classified as "below the poverty level." The number of persons below the poverty level was the sum of unrelated individuals and persons in families, each with incomes below the poverty level.

Persons for Whom Poverty Status is Determined--Poverty status was determined for all persons except institutionalized persons, persons in group quarters, and in college dormitories, and unrelated individuals under 15. These groups also were excluded from the denominator when calculating poverty rates.

Specified Poverty Levels--Since the poverty levels currently in use by the federal government do not meet all the needs of data users, some of the data are presented for alternate levels. These specified poverty levels are obtained by multiplying the income cutoffs at the poverty level by the appropriate factor. For example, the average income cutoff at 125 percent of the poverty level was $20,045 ($16,036 x 1.25) for calendar year 1996 for a family of four persons.

Comparability--Poverty data in the American Community Survey are for the past twelve months as opposed to data in the decennial census which is for a single calendar year.

POVERTY THRESHOLDS IN 1996 BY SIZE OF FAMILY AND NUMBER OF CHILDREN UNDER 18 YEARS (AVERAGE OF THE 12 MONTHLY VALUES)

Number of persons	Number of related children								
	None	One	Two	Three	Four	Five	Six	Seven	Eight plus
One person, under 65 years	$8,027								
One person, 65 years or older	7,399								
Two persons, UP under 65 years	10,330	$10,634							
Two persons, UP 65 years or older	9,326	10,594							
Three persons	12,069	12,419	$12,430						
Four persons	15,914	16,173	15,647	$15,701					
Five persons	19,191	19,469	18,874	18,412	$18,130				
Six persons	22,073	22,159	21,703	21,265	20,616	$20,230			
Seven persons	25,396	25,556	25,009	24, 629	23,919	23,090	$22,182		
Eight persons	28,405	28,656	28,139	27,688	27,047	26,234	25,385	$25,171	
Nine or more persons	34,169	34,335	33,879	33,496	32,865	32,000	31,215	31,023	$29,827

POVERTY THRESHOLDS IN 1997 BY SIZE OF FAMILY AND NUMBER OF CHILDREN UNDER 18 YEARS (AVERAGE OF THE 12 MONTHLY VALUES)

Number of persons	Number of related children								
	None	One	Two	Three	Four	Five	Six	Seven	Eight plus
One person, under 65 years	$8,253								
One person, 65 years or older	7,607								
Two persons, UP under 65 years	10,621	$10,933							
Two persons, UP 65 years or older	9,588	10,892							
Three persons	12,408	12,768	$12,780						
Four persons	16,361	16,627	16,086	$16,142					
Five persons	19,730	20,016	19,405	18,929	$18,640				
Six persons	22,693	22,782	22,313	21,863	21,195	$20,799			
Seven persons	26,110	26,275	25,712	25,32	1 24,591	23,739	$22,805		
Eight persons	29,203	29,461	28,930	28,466	27,807	26,972	26,099	$25,878	
Nine or more persons	35,129	35,300	34,832	34,437	33,789	32,900	32,092	31,895	$30,665

NOTE: The Census Bureau used monthly factors to derive adjusted annual income estimates in the Summary Tape File (SF.) tables. For the 1996 Public Use Microdata Sample (PUMS), a user can convert the income estimates to approximate adjusted income estimates by using the average annual adjustment factor of 1.016363. For the 1997 Public Use Microdata Sample (PUMS), a user can convert the income estimates to approximate adjusted income estimates by using the average annual adjustment factor of 1.0115.

Source: http://www.census.gov/ACS/www/index_b.htm

Year of Entry

The data on year of entry were derived from answers to questionnaire item 9, which was asked of persons who were not born in the United States. The question was asked of persons who indicated in the question on citizenship that they were not born in the United States. (For more information, see the discussion under "Citizenship.")

The ACS questions, tabulations, and census data products about citizenship and year of entry include no reference to immigration. All persons who were born and resided outside the United States before becoming residents of the United States have a date of entry. Some of these persons are U.S. citizens by birth (e.g., persons born in Puerto Rico or born abroad of American parents). To avoid any possible confusion concerning the date of entry of persons who are U.S. citizens by birth, the term, "year of entry" is used in this publication instead of the term "year of immigration."

Limitation of the Data--The census questions on nativity, citizenship, and year of entry were not designed to measure the degree of permanence of residence in the United States. The phrase, "to live" was used to obtain the year in which the person became a resident of the United States. Although the respondent was directed to indicate the year he or she entered the country "to live," it was difficult to ensure that respondents interpreted the phrase as intended.

Comparability--The year of entry question in the ACS was not the same as the year of entry question in the 1990 decennial census. The decennial questionnaire item asked "When did this person come to the United States to stay?", while the ACS questionnaire item asks "When did this person come to live in the United States?". Moreover, the year of entry question in the 1990 decennial census provided respondents with a fixed number of response options, while the year of entry question in the ACS collects year of entry through a write-in space.

Source: http://www.census.gov/acs/www/index_b.htm

Putting Children into Poverty Statistics[1]

ALBERTO MINUJIN
EVALUATION, POLICY AND PLANNING
UNICEF-NEW YORK

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[1] This paper includes parts of some of the documents and papers developed by EPP's Staff members. Part one was developed with Enrique Delamonica. The opinion of the author could not be the one of the Organization that he belongs.

CONTENTS

INTRODUCTION

The world is characterised by inequality in the distribution of income and wealth, high unemployment, lack of access to basic services, and persistent gender, racial, ethnic and geographical inequities. Thus, although output worth over 70 billion dollars a day is produced world-wide, the main challenge facing many countries is to combat the situations of poverty and exclusion that affect a large percentage of the population, in particular the children.

The social, political, economic and cultural obstacles that impede full incorporation of individuals into society, frequently appear at the very beginning of life, and signify disadvantages that accumulate to the point of creating situations of vulnerability that mark the road to exclusion. Therefore, childhood is the best moment for personal, social, ethical and citizen formation aimed at constructing peace, solidarity and particularly democracy. Childhood is the moment where the circle of poverty can be broken.

There are several reasons for this. First, situations of exclusion and vulnerability are the result of a process of accumulating disadvantages that begins at birth and strengthens with the passage of time. Childhood is the moment for acquiring knowledge and fostering creativity, as well as acquiring the necessary tools to ensure an adequate inclusion of this population group in the economy and society in the near future. Secondly, childhood is an ideal moment for making transformations that lead to the strengthening of the values of equity, solidarity and tolerance – which are factors for constructing social capital, and are necessary for advancing toward a society based on human rights. Finally, from an economic point of view, various studies have shown the high return on early investment in children, and the importance of investing in social and human capital for economic development.

In addition children, adolescents and women are essential for implementing the needed transformations. The inclusion of these two groups in the economic and social spheres, as well as their participation in political and cultural life, are firm steps toward constructing societies without poverty[2].

In summary, children are not just another "vulnerable group". In spite of the high consideration that we must have towards all vulnerable groups, children are at the base of society and in the centre of development. In terms of poverty, on the one hand, they are particularly affected, while on the other hand, they could and should be a crucial factor on solving the problem of poverty. In addition, it has been well demonstrated by many studies that the impacts of economic crisis are worse between the more vulnerable and in particular on poor children[3].

However, usually children are invisible in the political and macro policy arena as well as in statistics. That is also what happened in the policies and programs towards poverty elimination and in the statistical information referred to poverty. If we look at this problem from the point of view of the information that is required for monitoring the Convention on the Rights of the Child, the problem is even worse.

The objective of this paper is to make some consideration in this regard and present only one of the efforts that UNICEF is making to support the countries to improve the information available on children.

The document first discusses the relation between children and poverty and its measurement. At this point, some considerations are included on the "1 Dollar a day", the "Poverty Line" and the "Basic Needs" measurements. Second, the Convention on the Rights of the Child (CRC) and the commitments and goals set up at World Summit for Children (WSC) are introduced. The thematic clusters adopted by the Committee on the Rights of the Child to follow up the implementation of the CRC and the general

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[2] Mauras Marta, Alberto Minujin and Raquel Perczek (1999), " Infancia y Derechos o la fuerza transformadora" en Hewitt C. and A. Minujin Ed, **Derechos@Glob.net. Globalizacion y Derechos Humanos**, Santillana S.A., Colombia

[3] One of the first studies that document this is: Cornia A., Jolly R, Stweart F (1986), **Adjustment with Human Face**, UNICEF and Siglo XXI.

principles of the CRC are used to present a general analysis of information and sources. Finally, the document presents the Multiple Indicator Cluster Survey (MICS) developed by UNICEF at the mid-decade to asses progress in the achievement of the WSC goals, and recently updated for the "end-decade" review process.

1.   CHILDREN IN POVERTY AND POVERTY MEASUREMENTS

The latest, albeit, preliminary estimates of poverty by the World Bank, show that there has not been a significant reduction in the number of the poor in recent years. The headcount index (as a per cent of total population) has declined slightly between 1990 and 1998, mainly due to reductions in China and the rest of East Asia. Marginal reductions took place in the Middle East and North Africa and in South Asia, while not much has happened in Latin America and in Sub-Saharan Africa. Overall, the World Bank estimates roughly 1.2 billion people living with less than US$1 (in 1985 PPP), i.e. around a quarter of the population in developing countries[4].

Children are over-represented among the poor. The main reason for this is that invariably all surveys show that poorer households are larger and have more children. In other words, the aggregate regional headcount averages cannot be applied to the population under 18 years old[5] to estimate the number of poor children. They have to be adjusted by the difference in the number of children in households of different income levels. Taking this into account results in an estimate which shows that children represent at least half of the total population (Graph 1)[6].

Graph1
Most of the poor are children
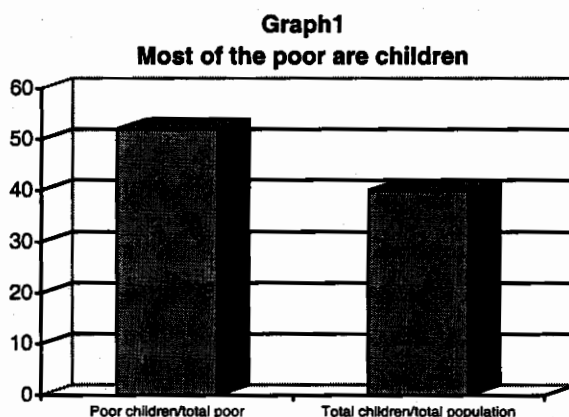
We can say that most of the poor are children. At the same time, poor children are over-represented among children. In other words, the proportion of poor children among all children is substantially higher than the share of all the poor in the total population (Graph 2). As it will be seen below this over-representation has implications for policies and programmes. Poor children grow to be poor adults with poor children. Tackling child poverty thus becomes crucial in the efforts to reduce poverty.

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[4]   The latest estimates can be found at http://www.worldbank.org/poverty/data/trends.

[5]   In the developing world this age segment represents 40 per cent of the total population.

[6]   See UNICEF (1999) **Protecting Children from poverty**.

Graph 2: Over-representation of poor children in the child population
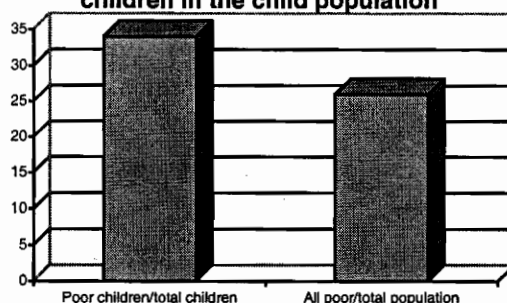
However, it must be stressed, these numbers are only an approximation. There is, in general, a dearth of information on poverty among children. Although it is possible to have information on the number of children in household income and expenditure surveys, this is usually not reported. International agencies do not include this information in the regular reporting and publications.

Moreover, special care needs to be taken to interpret what is being measured. The numbers mentioned above are all based on the internationally accepted 1US$-a-day (in 1985 PPP) poverty line. Although the disproportional impact of poverty on children would also be maintained if nationally defined poverty lines were used, the level and regional distribution would be different. This is the case because the internationally accepted line allows to compare across countries how many people live with less than 1US$ a day (in 1985 PPP), but it is not clear that it allows to compare poverty across countries. In the attempt to achieve a sophisticated international indicator, a rigorous comparison of something other than poverty has been obtained.

The main reason for this is that the US$1 (1985 PPP) measure of poverty is strongly related to GNP per capita (Graph 3). This is not the case for the national PL. In Graph 3 it can be observed that for low levels of per capita income (also in PPP), the headcount based on a nationally defined poverty line sometimes is above and sometimes below the headcount using the international line. In contrast at relatively higher levels of income this is not the case.[7] Actually, the proportion of people living with less than US$1 (1985 PPP) a day (or US$2 for that matter) is but a modification of the income per capita measured in PPP, i.e. income per capita adjusted for the distribution of income.

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[7] Regressions of the headcount index (national and international) with GNP per capita (both in current dollars and PPP) showed that while the US$1 a day line results in a significant negative relationship between poverty and the level of income, no association was found when the national poverty lines were used.

GRAPH 3: ALTERNATIVE POVERTY LINES AND PER CAPITA INCOME

Countries ranked by per cap. Income (PPP)

● National PL ■ US$1 PPP ━━Regression (US$1 PPP)
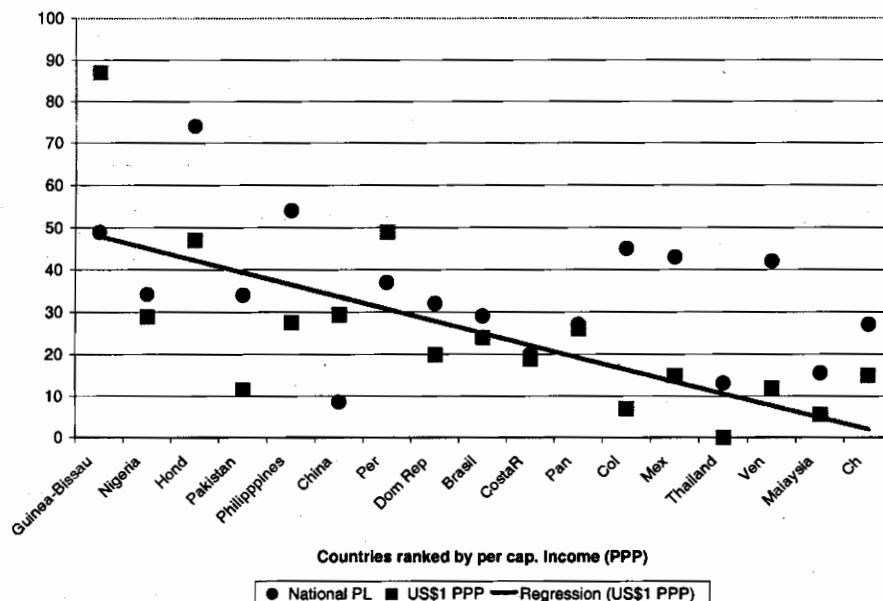
There is another, perhaps even more important, problem with the measurement of poverty. Poverty is a multidimensional phenomenon[8]. Lack of access to education is poverty; lack of access to basic health is poverty; unsanitary living conditions is poverty; hunger is poverty. Many, if not most of these dimensions cannot be captured in a money-metric index. Partly this is because these elements are not provided through markets, consequently access to income does not necessarily imply that access to the other elements will result from higher income. More significantly, if there are no schools (or health facilities, or safe water, etc), no amount of income will help satisfy these basic needs. This second concern cannot be addressed adjusting gross income with the imputed prices of publicly provided goods. The goods simply are not there. Thus, "basic needs" need to be measured directly and not be proxied or subsumed under the money-metric index.

Governments and international development agencies are involved in policies and programmes addressing dimensions of basic needs. Increasingly, they are coming to realise that the basic services required to satisfy those needs are the most important weapons in the fight against poverty[9]. Thus, data by income groups needs to be supplemented with access to basic needs. Moreover, the two measures need to be integrated. Also, it is important to disaggregate this information by age groups. For policy and programme designing, following the life cycle it is necessary to have information on early childhood, childhood and adolescence. This will allow to provide a better picture of child poverty and its relation to the situation if the family (and of the child within the family).

As it was mentioned above, children are not only part of the problem (they are over-represented among the poor) but they are also part of the solution. The policies and programmes that address the basic needs of children provide two distinct, but complementary, routes to reduce poverty. First, by providing basic services the worst aspects of poverty are eliminated. This reduces poverty today - and quite significantly. In addition, it provides the foundation for sustainable poverty reduction in the long run by

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[8]   Among many others, Sen (1999) **Development as Freedom** can be consulted.

[9]   UNICEF and the World Bank (1998) **Universal access to basic social services: a key ingredient for human development**, presented at the Hanoi Meeting on the 20/20 Initiative.

breaking the vicious circle of poor families raising poor children who in turn will constitute poor families. The crucial aspect in this approach is the complementarity of the basic services along the various dimensions of poverty and the participation and empowerment of the demand.

In this respect, the Convention of the Rights of the Child (CRC), provides a holistic and integrated view of the child and its development. The complementarities among health, education, play, participation, nurturing, and protection imply that all these aspects must be addressed jointly in order to reduce poverty. The complement to that is that the current shortcomings in these areas need to be identified, which is the topic of part 3. Before that, in the next part, a few more words on the CRC might be of use for those who are not familiar with it.

2.   THE CONVENTION ON THE RIGHTS OF THE CHILD [10]

In the context of the Universal Declaration on the Human Rights, the General Assembly of the United Nations adopted in 1989 the Convention on the Rights of the Child (CRC). In the light of the CRC, children's rights should be implemented without discrimination of any kind, all actions and policies should be guided by the best interests of the child, the participation of children should always be sought and all actions should aim at the promotion of the survival and development of children.

The Convention on the Rights of the Child is a landmark in the history of the United Nations standard-setting. It entered into force in a very short period of time, just 9 months, and has reached an unprecedented number of ratification's – 191, that is all countries but two (US and Somalia).

The Convention constitutes a common reference against which progress can be assessed and results compared. For UNICEF, the Convention provides a special opportunity to use its principles and provisions as a guidance for its programmes of co-operation, for advocacy and for the development of partnerships, designed to create a wide alliance in favour of children, as well as to monitor progress in the situation of children[11].

With the new ethical vision the Convention has brought, there is a need to address realities insufficiently considered so far, while sustaining achievements made in the traditional areas of work. For this to be possible, the systematic collection, analysis and dissemination of relevant data on all these areas becomes of essence. Moreover, relevant indicators need to be identified to enable trends to be assessed over-time, to recognise and narrow disparities, understand and address the root causes of prevailing difficulties, to measure progress and to reflect human rights values, including those of equity, non-discrimination, social justice, participation and empowerment[12].

In accord with the Convention, the Committee on the Rights of the Child, integrated by an international body of experts, was formed. It was set up to monitor the implementation of the Convention.

States parties are required to periodically submit reports to the Committee on the Rights of the Child containing information on the process of implementation of the Convention. Reports should include information on the measures adopted by the State, on the results achieved and on the factors and difficulties hindering further progress.

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[10]   Fore more information consult the following documents used to developed this point. E.g. Santos Pais, Marta (1999), **A Human Rights Conceptual Framework for UNICEF,** Innocenti Essays #9, UNICEF, and Division of Evaluation Policy and Planning, **Indicators for global monitoring of child's rights,** International meeting report, UNICEF.

[11]   Santos Pais Marta Op.Cit.

[12]   With this purpose in mind, important steps have been undertaken, see for example the Summary Report of the International Meeting on " Indicators for Global Monitoring of Child Rights and the "Implementation handbook for the Convention on the Rights of the Child" both available form the Division of Evaluation, Policy and Planning, UNICEF New York

To maintain the holistic consideration of the human rights of the children and organise the countries reporting process, the Committee groups the individual CRC articles into the following six interconnected thematic clusters:

- General measurement of implementation

- Civil rights and freedom

- Family environment and alternative care

- Basic health and welfare

- Education, leisure and cultural activities

- Special protection measures

Some of the measurable articles that integrate the clusters can be seen in Annex Table 1. This table presents, in a very condensed way, the availability of information for some clusters and some selected articles of the Convention.

As we can observe:

- Only in a few cases is statistical information available in most of the countries.

- The lack of information is almost total in clusters like civil rights and freedom and special protection and rights like participation or leisure, play and cultural activities.

- In some key aspects like family environment and early child care and development the information is weak or not available.

- Household surveys are an important source of information.

THE WORLD SUMMIT FOR CHILDREN

In 1990, in order to promote practical actions on children's rights, UNICEF assisted in the organisation of the first World Summit for Children (WSC). At this time, 77 Heads of State and Government committed their countries to the achievement by the year 2000 of a manageable set of major and supporting goals. Most of them related to the survival and health welfare of children and mothers. As can be observed in Annex Table 2, the WSC's goals cover a limited, but very basic, number of child's rights.

Based on the goals, a Plan of Action was developed which included an obligation on States to monitor and report the achievements they had made. In order to make this monitoring a reality two points in time (one by mid-decade and the other at the end of the decade) have been chosen to review the WSC's goals situation in terms of the achievements, constrains and failures. The mid-decade review allowed the countries and international organisations to define new or supplementary measurements to promote the accomplishment of the commitments. Regarding the end-decade review and in accordance with what was decided on the WSC, the UN's Secretary General will present a report on "Progress on the Implementation of the world Declaration and plan of Action from the World Summit for Children" to the 53rd Session of the general Assembly in the year 2001. On this regard a country, regional and global review process has been initiated.

For the monitoring activities the existence of statistical information is key. Although progress has been made in the world of statistics and that the goals refers to a group of basic rights, the lack and inaccuracy of data is evident. This challenges us to make additional efforts.

3.   THE MULTIPLE INDICATORS CLUSTER SURVEY (MICS)[13]

To face these challenges, UNICEF has embarked upon an important process of child data gathering, analysis and dissemination designed to monitor achievements in the implementation of the Agenda of the World Summit for Children and of the Convention on the Rights of the Child.

In this process, special reference should be made to MICS, the Multiple Indicator Cluster Survey. It was developed at the Mid Decade to assess progress in the achievement of the Summit goals, and recently updated for the End Decade Review Process, to be held in 2001.

To develop this methodology, UNICEF worked with several partners, like WHO, UN Statistical Division, UNESCO, UNAIDS, ILO, USAID and academic institutions. This concerted effort has given the collection, analysis and interpretation of child and women specific data a unique impetus and will certainly continue to provide a special opportunity to improve the living conditions of children and women around the world.

Based on Household surveys designed to complement existing statistical systems, the MICS process has enhanced the understanding of the reality of children in a large number of countries.

- In fact, in 1995, before MICS, only 28 developing countries had data on oral rehydration therapy, after MICS, 63 countries had relevant data in this area

- Data on trends in child malnutrition was improved from 38 countries (before MICS) to over 70 following its implementation.

The methodology has proven to be reliable, practical and inexpensive (compared to other experiences and processes) therefore enabling its use and adjustment to the specific conditions of countries and regions - including countries in war (like Somalia and Liberia) or in transition (Eritrea).

MICS achieved major successes:

- 60 countries have implemented MICS Surveys (30 of which were in Sub Saharan Africa, the poorest region where greatest information needs prevailed)

- Other countries have used MICS modules as part of other household surveys and to confirm child specific data from routine reporting systems

- Many countries used these new data to better focus programmes and policies, for instance to combat low levels of immunisation and high levels of malnutrition

- These surveys were usually carried out by national staff- they have strengthened local skills and expertise on data collection, analysis and interpretation, as well as research capacity; and they have further enhanced the government's sense of ownership (Governmental staff was involved in 90% of the countries)

- Awareness of the importance of reliable data on children has sharply increased, leading to the development of information systems

- Accountability for children has grown and led to a better planning system, including with a view to ensuring priority to the regions with greater needs.

MICS was designed to monitor progress at Mid Decade in seven goals:

- Immunization

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[13]   Extracted from Santos Pais Marta (1999), "The Challenge of Monitoring the Observance of the Convention on the Rights of the Child" , presentation made at the 52nd Session of the ISI, Helsinki.

- Vitamin A Coverage
- Salt Iodization
- ORT Use
- Malnutrition
- Education
- Water and Sanitation

In 1997, UNICEF assembled a team of independent experts to evaluate MICS. The objective was to assess whether and how the survey could be adapted for future monitoring of the WSC[14].

The evaluation has revealed a high level of satisfaction with the MICS experience.

The evaluation also showed that other areas were equally relevant to children and had to be considered in the future:

- to monitor implementation of the CRC or address specific areas not covered by the WSC (e.g. child labour and child disability)
- to provide visibility to emerging priority areas (e.g. HIV/AIDS)

All these lessons learnt from the first MICS experience are now informing the End-Decade Review Process. In this spirit, the MICS 2, recently launched, has identified an additional set of indicators to include major areas of concern, which had not been addressed before[15].

In the list, it is important to note the inclusion of issues such as:

- birth registration (in the area of civil rights and freedoms)
- children living with or without their parents and orphans (to address the area of family environment)
- child labour and child disability (to consider areas where special protection measures are required)
- HIV/AIDS are an emerging reality which has become one of the most devastating causes for child's death, marginalisation and neglect.

UNICEF is promoting the use of MICS to analyse disparities in children's well-being, gender and geographical areas, and the characteristics of poor children and their families. In this regard, UNICEF is looking to include several additional questions for assessing the economic status of the household (see Annex Table 3).

For that, UNICEF's Monitoring Unit is working with the World Bank to choose a group of assets that can be gathered through MICS' questionnaires. A study made by the WB indicates that it is possible to calculate an "asset index", as a proxy for income or expenditure measures, that "is robust, produces internal coherent results, and provides a close correspondence with State Domestic Product and poverty rates data"[16]. The results obtained from the use of the "asset index" to analyse data from the Demographic and Health Survey (DHS) seems to indicate that it could be a useful tool to differentiate social groups.

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[14] Division of Evaluation, Policy and Planning (1999), **Evaluation of Multiple Indicators Cluster Surveys**, UNICEF, New York.

[15] More information on MICS can be find at www.childinfo.org

[16] Filmer Deon and Lant Pritchett (1998), " Estimating wealth effects without income or expenditure data-or tears: Educational Enrollment is States of India", World Bank Policy research Working Paper No. 1994, The World Bank, Washington DC

The inclusion of the additional questions in the MICS will allow using its results in a co-ordinated way with the DHS ones on poverty analysis.

TABLE 1
CRC'S CLUSTER BY AVAILABILITY OF INFORMATION AND SOURCES

CRC's CLUSTER Some Articles	INFORMATION (1)	SOURCES (2)	Comment
CIVIL RIGHTS AND FREEDOM			
Right to Name and Nationality	*	**R**	More than 40 million non-registered newborn by year
Freedom of Expression/Association	-	S	No info on children participation
Child's Access to information	-	S	No info on children participation
Right not to be subjected to torture or punishment	-	R/S	
FAMILY ENVIRONMENT AND ALTERNATIVE CARE			
Separation from parents/care outside home	-	R	
Children deprived of their family	-	S/HS	
Family environment	✔	HS	Lack of cross-tabulation
Adoption	*	R	
Protection from all forms of violence	-	R/S	
Public Sector expenditure going to child care	-	R	Budget allocation on basic services is available in some countries
BASIC HEALTH AND WELFARE			
Right to life and survival	✔ /*	R	Important improvements but still inaccurate data in some countries
Physical Health	*	R/HS	
Mental Health	-	S	
Right to Health Services	*	R/HS	
Right of Disabled Children	-	R/S	
Right to Adequate Standard of Living	✔	HS	
EDUCATION LEISURE AND CULTURAL ACTIVITIES			
Right to early child care and development	-	R/HS	Recent Improvements
Right to basic Education:			
Access	✔	R/HS	
Completion	*	R/HS	Weak on dropout / repetition
Learning/Quality	-	S	
Right to leisure, play and cultural activities	-	S/R/HS	
Public Sector Expenditure going to basic services	*	R	
SPECIAL PROTECTION MEASURES			
Children in situation of emergency	*	R	Very weak information
Children deprived of liberty	*	R	Very Weak information
Child Labour	-	HS/S	Recent improvements
Sexual Exploitation	-	S	
Sale, Trafficking and Abduction	-	S	

1. Information:
✔ Available in most of the countries
* Available with problems in many countries
- Not available in most of the countries or not reliable

2. Sources: (Refers to available or possible sources)
R Administrative registers
HS Household Surveys
S Other Surveys
S Other Surveys

TABLE 2

LINKS BETWEEN THE CONVENTION ON THE RIGHTS OF THE CHILD WITH THE WSC MAJOR GOALS

CONVENTION CLUSTERS	WSC MAJOR GOALS [1]
Civil Rights and Freedom	
Family Environment and alternative care	
Basic health and Welfare	Reduction of: • Infant and U5 Mortality; maternal mortality • Severe and moderate malnutrition • Universal access to water and sanitation
Education, Leisure and Cultural activities	Universal access to basic education Reduction of adult illiteracy
Special protection measures	Improved protection – children in difficult circumstances

[1]   The WSC approved as well a set of supporting goals

TABLE 3

MICS, QUESTIONS ON DWELLING AND HOUSEHOLD ASSETS

1.   Relevant questions already included in MICS2

Material of dwelling floor

Number of rooms in dwelling floor

Main source of drinking water

Toilet facility used water

2.   Additional questions which need to be included (according to World Bank)

A	DOES YOUR HOUSEHOLD HAVE:	Electricity? Yes No A radio? A television? A refrigerator
B	DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	A bicycle? A motorcycle or scooter? A car or truck?
C	DOES YOUR HOUSEHOLD OWN ANY FARM LAND, AND DOES ANY MEMBER OF THE HOUSEHOLD WORK IT:	Owns farmland? Works own farmland?
D	DOES YOUR HOUSEHOLD EMPLOY SOMEONE WHO HELPS WITH THE DOMESTIC WORK	Has domestic worker

SESSION 4:

POVERTY AND SOCIAL EXCLUSION

Statistics on Social Exclusion:
The EU Methodological Approach

Lene Mejer
EUROSTAT, UNIT E2 LIVING CONDITIONS[1]

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ABSTRACT

This document sums up the policy and statistical background for analysis of social exclusion at Community level. It then tries to set out the theoretical framework for statistics on social exclusion by making clear the choices to be made and the practical limits for analysis based on the current statistical sources available. A list of social exclusion indicators is tentatively proposed and the link to the theoretical model is underlined. The final paragraph outlines the next steps to be carried out in terms of analysis of ECHP data in order to implement the framework.

1. INTRODUCTION

1.1 Policy background

The definition of poverty used by the European Commission appears in the Council Decision of December 19, 1984: The poor shall be taken to mean persons, families and groups of persons where resources (material, cultural and social) are so limited as to exclude them from a minimum acceptable way of life in the Member States in which they live."

According to this definition, poverty contains several dimensions and depends on the average level of development in each Member State. Eurostat has made this definition operational using income as a reference point. Households are poor when the household income is below a certain level, known as the poverty line. In practice the term poverty has thus been identified with income poverty, while the term 'social exclusion' was not treated within the EU explicitly in a political legal context until the introduction of the Amsterdam Treaty.

Exclusion can broadly be defined as the process which prevents people from participating fully in society and from being socially integrated. The Amsterdam Treaty creates new scope for Community action to combat exclusion because the social chapter has been integrated into the Treaty and the provisions in the chapter concerning social exclusion have been strengthened:

Article 136 lists 'the combating of exclusion' as one of the six objectives of European social policy.

In article 137.1 the integration of persons excluded from the labour market is mentioned as one of the fields in which Community actions is to support and complement the activities of Member States.

Article 137.2 creates scope for action at Community level by encouraging 'cooperation between Member States through initiatives aimed at improving knowledge, developing exchanges of information and best practices, promoting innovative approaches and evaluating experiences in order to combat social exclusion.'

The statistical support needed to implement the Treaty will require collecting and reporting data, not only on monetary income, but also on the social and economic context in which poor people live and the manner in which policy (social protection, health, education etc.) impinges on them. Furthermore, the Social Exclusion Action Program for the period 2001-2005, which is now under preparation, envisages strengthening indicators and statistics on social exclusion, including its dynamic aspects, through cooperation between national statistical organisations and Eurostat. The purpose would be to improve compatibility and comparability of national and Community data sources on social exclusion.

1.2   Progress in measuring social exclusion

Three steps have been important for the translation of the policy terminology of social exclusion into statistical concepts (see Baigorri, 1999):

1): The seminar on Social Exclusion in Bath (1994)

2): The High Level Think Tank (HLTT) on Poverty Statistics (January1998)

3): The Task Force on Statistics on Social Exclusion and Poverty (Spring 1998)

More particularly, the Bath seminar advised Eurostat to change from a financial concept of poverty to a multi-dimensional concept. The development of statistics on social exclusion follows this advice.

The HLTT repeated the request of the Bath seminar, and the first concrete work was carried out in the Task Force which was convened during spring 1998 (see Eurostat 1998.)

2.   A SCHEME TO MEASURE SOCIAL EXCLUSION AT EU LEVEL

2.1   The theoretical input

Two models, from Berghman (Berghman 1997) and Ringen (Ringen 1985 and 1995) respectively, served as framework for the discussions in the Task Force on how social exclusion could be analysed. This framework is not developed further in this paper, - instead it is put into a historical context and the link to the statistical scheme is advanced further (see also Eurostat 1998).

In order to consider measuring social exclusion in the EU Member States, it is of course essential to have a vision of what the 'social reality' is in those countries as well as to try to pin down the concept of social exclusion.

Both Berghman and Ringen put the development of the concept of social exclusion into a historical context starting with the development of poverty analysis as an absolute phenomenon related to the minimum necessities required to sustain a living for the individual/household[2]. For that, a poverty line was developed in terms of calculating an income level which corresponded to the value of these necessities (the earliest and most well known example of this is Rowntree's calculations for York starting at the end of the 19th century) (Ringen 1985).

Secondly, the relative notion of poverty was developed during the 1960s. This approach considers poverty in relation to the average or typical standard of living in society and not in relation to the individual's needs as hitherto. The Eurostat tradition of analysing poverty in relation to a fraction of mean/median income falls into this category of analysis[3].

Thirdly, a lack of satisfaction with basing poverty measurements too narrowly on income/consumption poverty lines led researchers to broaden their framework of analysis by looking at multiple deprivation measures and social inclusion/exclusion/participation issues. Thus, the attempt has been to broaden analysis from material well-being to encompass more general notions of welfare.

It should be underlined that both Berghman and Ringen still put emphasis on understanding poverty in terms of low income/resources as a starting point for broadening the analysis into social exclusion. As an illustration, Berghman uses the following figure to demonstrate the basic policy chain

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[2]   This is still the basic method used for calculating poverty lines in the USA.

[3]   For Eurostat's recommendations on measurement of income poverty see SPC 98/31/2. Eurostat is still developing its approach to the analysis of income poverty, by investigating, among other possibilities, measures of absolute poverty.

which could be used as an inspiration for the statistical scheme for social exclusion (see Berghman 1997):

FIG. 1
THE BASIC POLICY CHAIN:
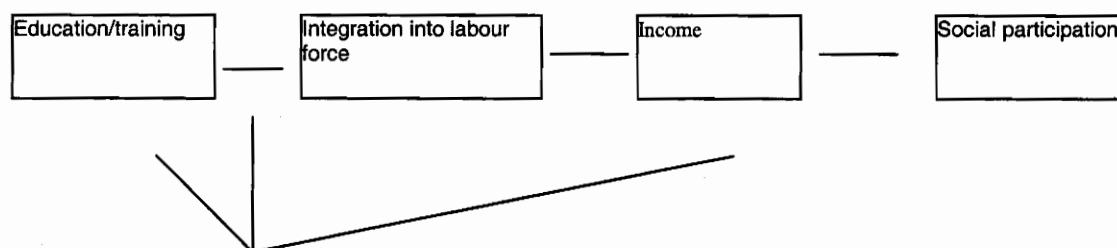
Berghman also considers demographic variables to be linked to education, labour, income and consumption. Equally, Ringen (1985) has presented a framework for the measurement of welfare. He considers issues of multiple deprivation as an enlargement of the notion of poverty.

Ringen has later (see Ringen 1995) been more explicit about his viewpoint on measuring welfare. His perspective is that people have different preferences for arranging their lives. These preferences should be respected by researchers who want to compare welfare and by policy makers who make plans for a better society. Thus he develops on what choices/constraints the framework should consider by setting terms for which resources the individual can use, in which domain/arena the person has to make his/her choices and what are the outcomes in terms of possible consequences.

The Ringen and Berghman frameworks are helpful for the selection of the set of potential indicators for social exclusion because they give two broad directions. Firstly, to keep income as an important variable in analysis, and secondly, to broaden the set of indicators to reflect social inclusion/exclusion.

The outcomes are the ones which is measured in the statistical scheme on social exclusion. They are here interpreted via three broad groups of variables: objective means (for example ownership of accommodation or durable goods), a more subjective perception of life[4] (for example how well a household can make ends meet) and lastly respondents' confidence in their life situation (happiness, satisfaction).

2.2   The link between theory and practice

Some indicators such as level of income and labour market status are judged, by policy makers, to be particularly influential upon social exclusion. The Task Force therefore agreed to start the analysis of social exclusion where it has the most severe consequences, for example in the lower income groups. This is based on several considerations as described in this paper: research initiated in the field, policy input, current practice in statistics in describing poverty and social exclusion and the availability of data.

By starting the analysis with low income households, the link between income poverty and social exclusion is kept visible. The analysis will show, using comparisons with the rest of the population, that

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[4]   The variables related to perception of life are put down as expressing 'subjective' opinions although their degree of 'subjectiveness' differ from one variable to the other.

while other groups may also suffer deprivation in form of their labour market situation and their scores on social exclusion indicators, they do not form part of the low income group and therefore are not considered to be 'socially excluded'.

Employment status is seen to be of great importance, obviously because being employed provides the income on which a person/household lives but also because it is the core of the social tie, and is interpreted in society as giving social identity, status, contacts, satisfaction and protection of the family from long term poverty. Thus the labour market position plays an important role in the characterisation of social exclusion and, in line with article 137.1 of the Treaty of Amsterdam, it is proposed as a second important variable.

Social exclusion is a complex phenomenon requiring not only quantitative indicators but also subjective elements in order to be characterised. Consequently, the social exclusion of low-income groups is better described by combining their labour market position with indicators showing:

i.   their available means;

ii.   people's perception of their role and situation in society;

iii.   their confidence/satisfaction in life.

This characterisation is inspired by Ringen 1995 (see above).

2.3   The statistical scheme

The conceptual framework presents some limitations when applied, particularly when taking into account the availability of data. That is why a more pragmatic approach has been adopted to satisfy the current demand from the European Commission on statistics in this domain. At the moment Eurostat is working with 37 non-monetary variables (with a total of 42 variable categories) to be included as social exclusion indicators. All these indicators are based on ECHP data.

FIG. 2
FRAMEWORK FOR ANALYSING SOCIAL EXCLUSION
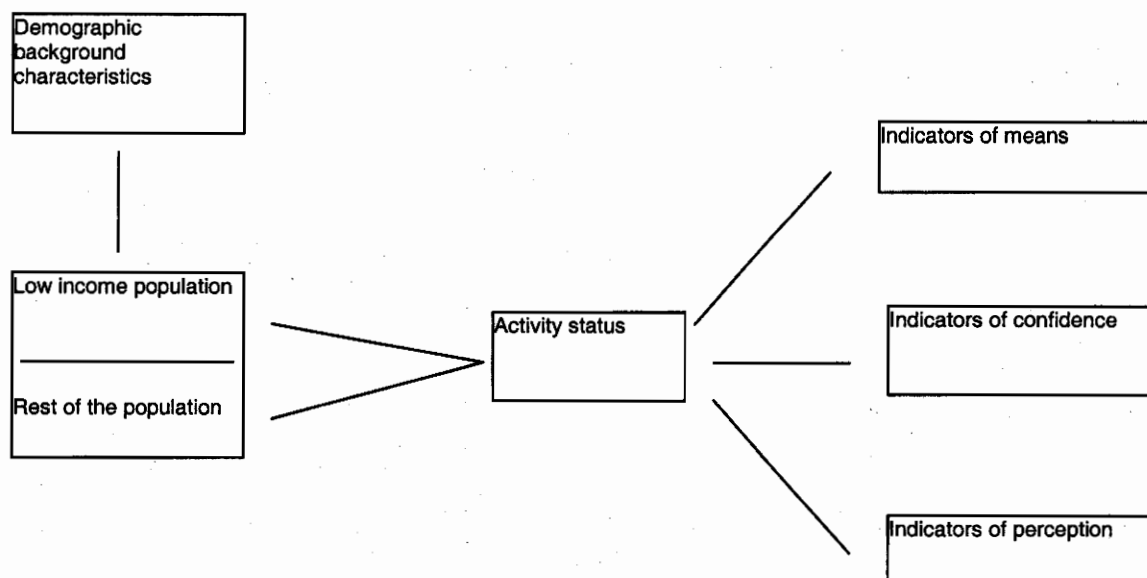
Unlike figure 1, figure 2 does not imply any causal relationship. It is merely a stratification model showing the elements used for analysis. Obviously, a causal relationship might be detected by using the model, for example linking education, employment status and income level.

Figure 2 shows the framework for the analysis presently being carried out. The steps are as follows:

1. Stratify low-income households according to

      (i) demographic background variables and

      (ii) labour market status (not only of persons but also of households)

2. Select suitable indicators for the characterisation of social exclusion by analysing income groups in relation to these indicators. The analysis should detect if a negative pattern is present excluding this group from a given dimension of life which is widely accepted in the society.

3. Compare households and individuals to the rest of the population according to the selected social exclusion indicators and taking into account labour market status.

Beyond this a fourth dimension is being developed:

4. Apply longitudinal analysis in order to get a better understanding of situations of persistent poverty/social exclusion and the factors which prevent/promote income mobility among low-income households which might improve their situation relating to other factors (labour market situation and the social exclusion indicators).

2.4   Defining low income households

The definition of low-income households used by Eurostat has been explained in the report for the SPC, November 1998 (see Eurostat 1998).

The income definition used here is a net monetary income concept although the recommendation is to include also non-monetary components such as benefits in kind and imputed rents. The reason why this is not done is that the ECHP does not provide such information at the moment. This might have some effect on the income distribution especially regarding the missing information on operating surplus of the owner occupied dwelling (imputed rents).

The threshold for defining low income households has been set to 60% of the median net equivalised income per person.

The use of the median instead of the mean caused some discussion during the Task Force work. In statistical terms, the main advantage of the median is that this measure is less affected by the extreme values of the income distribution and is less affected by sampling fluctuations. This property becomes crucial if we intend to use longitudinal studies in the analyses of poverty to try to identify trends.

It can be argued that the use of the median is less accurate and relative than the mean because it is based on only one or two reference points on the income distribution. One of the consequences of this characteristic is that the median is unaffected by changes in the top or the bottom of the distribution. For example, an increase in the income of the last two deciles of the distribution would increase mean income but median income would remain constant. The fact that the median applies to the middle part of the distribution may be considered as a reason to choose the median rather than the mean, because social exclusion implies distance from the standard income level, which is the the income level in the middle of the distribution.

As regards the cut-off point, 60% was chosen because it is a more robust threshold (in terms of data quality) than 50% of the median. It has not yet been proved that a certain percentage would

represent the 'real' division between the 'low income group' and the rest for the EU Member States. The Task Force considered, however, that it is advisable to show several cut-off points explicitly because when only a single cut-off point is selected, there is a risk that some of the features of the income distribution concerning low-income households are not shown. The analysis of using different cut-off points in relation to the social exclusion indicators has been carried out and shows some effects of using different cut-off points (see Eurostat 1999).

To compare the resources of households with different patterns in size and composition, it is necessary to use an equivalence scale. The scale specifies how a household's needs increase as a function of its size. The modified OECD scale used by Eurostat counts additional adults as 0.5 units and children as 0.3 units. In the classical OECD scale each additional adult is counted as 0.7 and the youngest children as 0.5. By convention and for continuity of the results already published, the Task Force recommended maintaining the modified OECD scale used in previous Eurostat publications to ensure the comparability of the figures. It was, however, also recommended to investigate the effects of using other scales. This exercise has partly been carried out by comparing scales used at national level to the Eurostat (OECD modified) scale using ECHP data for the calculations (see Eurostat 1999).

The Task Force devoted some time to examining the effects of choosing either the household or the person as basis for the distribution of income and for counting the number of low-income households. Social policies relate to both individuals and households. The use of households as a unit of measurement in statistical analyses is complex because of differences in definition as well as in household size and composition[5].

Statistics for social policy in general use the person as the statistical unit. Moreover, it might be taken into account that the income status of individuals within other measurements units (e.g households) may not be equal. Because of different household sizes and compositions, the Task Force recommended the use of individuals as "the unit of distribution" to estimate low-income thresholds based on the income distribution, assigning the same equivalised income to all members within one household (including children)[6].

For consistency, the Task Force also recommended using individuals as the unit of analysis. Using individuals is less affected by differences in household size and composition and therefore a more robust unit for analysis, particularly when it comes to assessing and developing social policies at the level of each citizen. Using individuals makes it possible to undertake statistical analysis at the level of the total population as well as for specific sub-groups. The use of individuals as the unit of analysis does not preclude using other units where this may be more relevant and useful, such as the household which is an important supplementary unit of analysis for assessing and developing social as well as other policies related to the family.

2.5   The social exclusion indicators

Four specific and more general conditions for the choice of indicators have to be fulfilled in order for them to be accepted as proper indicators of social exclusion.

(i): Firstly, indicators to be used should reflect aspects of a pattern common to a majority or great part of the population in the European Union. The negative aspect of a pattern should mean that the

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[5]   It should also be noted that administrations of social security benefits often operate with other units as the 'tax unit' or 'the benefit unit'. Statistical offices which use such register information has to take account of such facts whereas such units are normally not defined in household surveys.

[6]   There is an emerging literature on the intra household distribution of income, meaning the extent of income sharing within households.

person (group) is excluded or deprived from a given dimension of life, which is widely accepted in the society in which he/she lives[7].

(ii): Secondly, the indicator should be suitable for international comparisons, meaning that it should have the same information value in the countries. Lack of a phone, which is an important means of communication, available to 90% of European households, is a good example of this. On the other hand, absence of central heating in the dwelling is not an indicator that gives the same information in all Member States. In Finland and Austria, for instance, it is most likely experienced as a lack of an essential amenity, while in Greece or Spain it might be seen as the absence of a luxury item[8].

(iii): Thirdly, the indicator should allow comparisons over time, for example it should measure changes in certain aspects of deprivation and social exclusion over years.

(iv): Lastly, expectations about causal relationships between indicators and social exclusion should be visible and explicable; for example: - lower income is expected to be associated with a lower consumption, and with above average labour market exclusion. Poor education is expected to be associated with an above average relational exclusion rate and with an above average disability rate, etc.

The ECHP covers the main elements of the income concept including income subcomponents and it also contains information about demographic characteristics, labour status of persons and the classification of households according to socio-economic characteristics. All this data available at micro-level allows the stratification of the sample according to the suggested variables.

The cross-classification of income and labour together with the analysis of different categories for the selected social exclusion indicator introduce an important breakdown of the sample. For each social indicator, the reliability of the results has to be assessed before including the indicator in the analysis.

3. FIRST OUTCOME OF THE STATISTICAL SCHEME

In order to identify and select the candidate variables for social exclusion indicators as presented below in table 1, a pragmatic approach was chosen. The statistical material available consisted of the two first waves of the ECHP covering a couple of hundreds non-monetary variables as existing in the ECHP User Data Base. These variables were compared with a whole variety of non-monetary social -, poverty - and exclusion indicators already used in national or Eurostat publications. An effort was made to match the variables in the ECHP with those mostly used at national level.

To find out whether an ECHP based indicator met each of the requirements described in section 2.5, the comparisons of relative frequencies of the variable categories used to derive the indicator was made both across countries and over time. This procedure allowed the selection of a first set of indicators on an empirical basis.

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[7]   One should be careful to discriminate between lack of amenities which society considers to be essential and those which are merely 'nice' to have. A dishwasher might be considered to be 'nice' to have whereas a telephone might considered to be essential also as a means of communication.

[8]   E.g. some variables might be applicable in some countries only, but in those countries it will be a relevant variable of social exclusion as for example lack of adequate heating. It should be considered if such variables can be used for groups of countries. Furthermore, over time, some variables might change 'value', for example going from being a luxury good to a 'necessity'. Such changes can be studied given that data is available over long enough time periods.

The 37 ECHP variables which were the resulting social exclusion indicators were divided into 8 domains as shown in table 1[9]. These variables are grouped again in order to show if they measured an objective dimension (means) or a subjective dimension (perception or confidence).

This list of 37 variables is a preliminary list which Eurostat is currently working with. The list might be developed based on external input (policy demands) or depending on further analysis of ECHP data (introducing longitudinal analysis will introduce more variables).

Furthermore, the division of variables into 'means', 'perception', and 'confidence' indicators might also be discussed for certain variables. It is not always obvious what can be considered to be an objective statement or a more subjective perception of the persons asked in the ECHP interview.

Table 1 shows that the ECHP can provide variables on all three indicator areas but that there are fewer 'confidence' variables (4) than means (17) and perception (16) variables.

Regarding the domains, it should be noted that some domains are rather thinly covered. Firstly, only variable 19 refers to crime – and this is grouped under the domain 'housing'. Secondly, only one variable is used on education. Thirdly, variables on for example parental situation (for studying inter-generational social mobility),political affiliations and child-care issues are not present in the ECHP. On the other hand, the variables used provide a fairly broad picture of living conditions of EU households and also take into account more subjective components.

The questions in the ECHP related to consumer durables distinguish between respondents who 'would like to have but cannot afford' and those who 'don't want/don't have for other reasons' (variables 1-6 in table 1). It is only the former group which is analysed in the context of social exclusion.

At the moment the variables shown in table 1 are not ranked in any order of importance. Further developments including the actual analysis might give justification to ordering the variables to show their relative importance for situations of 'social exclusion'. Thus, at the moment, there is no intention of making an overall level of social exclusion.

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[9]   In figure 2 the labour market variables (domain 4) were shown not to be part of the social exclusion indicators whereas here they are included. The cause is that the social exclusion indicators were tested for their relation to low income households and not in relation to the activity status.

TABLE 1

LIST OF SOCIAL EXCLUSION DOMAINS AND VARIABLES:

Domain	Indicators on means	Indicators on perception	Indicators on confidence
Domain 1: Basic needs and consumption (food, clothing, necessities, durables)	1. Access to a telephone(s) 2. Access to a colour TV 3. Access to a car(s) 4. Access to a video recorder 5. Access to a microwave 6. Access to a dishwasher	7. Household ability to afford adequate diet 8. Household ability to afford to buy new clothes 9. Household ability to afford to keep home adequately warm 10. Household ability to afford having friends or family for a drink/dinner 11. Household ability to afford a week holiday away from home	
Domain 2: Housing	12. Accommodation rented from a public, municipal or non-profit agency 13. Shortage of space (objective: having less than 1 room per person) 14. Presence of shower or bath in the dwelling 15. Having a place to sit outside (access to garden or balcony)	16. Shortage of space (subjective) 17. Inconveniences from humidity 18. Inconveniences due to rot in windows and frames 19. Perceived risk of crime or vandalism in the area	20. Satisfaction with the housing situation
Domain 3: Education	21. Highest level of completed education		
Domain 4: Labour market	22. Living in a non-working household 23. Living in a household where unemployment benefits are the main source of the household income 24. Personal position on the labour market (ILO definition)		25. Satisfaction with work or main activity
Domain 5: Health	26. Coverage by a medical insurance 27. Hospitalisation in past 12 months	28. Health status (self-reported) 29. Limitations in daily activities due to a chronic health problem, illness or disability	
Domain 6: Family ties and social relations		30. Frequency of contacts with family or friends 31. Frequency of contacts with neighbours	
Domain 7: Social participation	32. Membership of a club or association		33. Satisfaction with the amount of leisure time
Domain 8. Indicators of the household financial situation/ financial stress		34. Household ability to make ends meet 35. Household ability to pay scheduled utility bills 36. Household ability to save regularly	37. Satisfaction with the financial situation

The controls on the variables were done in practice by way of the following checks:

1. consistency of definition across Member States for each variable;

2. consistency of definition over time for each variable (two waves ECHP data);

3. on the population coverage by variable;

4. on the relative number of missing cases per variable and their possible impact on the quality of information on the variable;

5. on the country differences in the distribution of the variable categories (including identification of outliers);

6. on the inter-wave differences in the distribution of the variable categories (including identification of outliers);

7. on the differences in relative frequencies of the variable categories from the ECHP and from external sources (if any);

The checks done on the variables led to the following findings and comments:

All variable categories selected meet criterion I (see p. 7). The only variable which might be seen as an exception from the rule is the variable 'membership of a club or organisation'. In six of the Member States considered, membership is a pattern common to less than one third of the population and not to a majority, as required by the criteria.

All 44 variable categories selected also meet criterion II, which means that they all carry information which is comparable internationally[10]. However, for some countries and for some variables the data on the variables are of different or insufficient quality (for example due to large numbers of missing records, differences in the variable definition, differences in the population coverage, differences in the question wording, absence of the question in the questionnaire). Therefore they do not allow comparisons for all Member States which took part in both the first and second wave of the ECHP (12 and 13 Member States respectively). In most of such cases comparisons are possible for 10 or 11 of the countries.

Almost all variable categories selected meet criterion III which means that they allow comparisons over time (in other words changes in the phenomenon measured which took part in the period between two waves of the ECHP held in 1994 and 1995). The exception is the variable 'coverage by medical insurance' which was not measured in the first (1994) wave of the ECHP.

Some of the variables do not allow comparisons over time for all Member States, but only for a limited number of them (in most of the cases for 9 to 11 Member States). The obstacles found are of different kinds (changes in the questionnaire, changes in the variable definition, in the routing of questions and so on which took place in the second wave of the survey).

As many as 42 out of the 44 selected ECHP variable categories meet all three first-mentioned criteria. This means that each of them might be considered as a non-monetary indicator of a particular dimension of social exclusion, in other words exclusion from one single aspect of 'mainstream society'. Each of them reflects a disadvantageous position, deprivation or dissatisfaction in respect to a particular aspect of the life situation or living conditions characteristic of the majority (or a large part) of the population of the EU and Member States.

A large number (36) of the selected non-monetary variable categories not only meet criterion I, II and III but also criterion IV[11]. This means that for each of them a relationship is found with monetary poverty in the sense that the low-income households in the EU register considerably[12] more often for the

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[10] Although the ECHP is a highly harmonised and centrally managed (Eurostat) survey some differences may appear between the countries in the information collected. The differences might be due to the inevitable problems of translation of the centrally designed questions (differences in meaning of the questions), due to the cultural differences between countries (for instance differences in the inclination to give positive/negative answers to survey questions, in particular to those of subjective nature like ones on health status, on financial difficulties or on satisfaction with different situations) or due to other reasons. Another consideration is that institutional differences (for example concerning provision of public services) between countries might lead distinct populations to interpret the same questions differently.

[11] In fact there are only 7 variables (8 variable categories) where the difference betw een low-income households and the remaining households is not large enough. The variables are 'vandalism or crime in the area', 'not covered by medical insurance', 'percentage of persons admitted to hospital the last 12 months', 'frequency of meeting friends and relatives', 'frequency of talk with neighbours' (both variable categories), 'membership in a club or organisation' and 'not satisfied with amount of leisure time'.

[12] When referring to the EU level, this means that at least 25% (difference in the proportion of poor and non-poor persons who score on the variable).

variable category than the rest of the EU population. The relationship is recognised in (almost) all Member States and in both waves of the ECHP regardless of the threshold applied.

The 36 variable categories which meet the fourth criterion in addition to the first three, might be used not only as non-monetary indicators of social exclusion but also as non-monetary indicators of income poverty. They can help us explain particular non-monetary aspects of life of those who are poor in monetary terms. In some cases, where the relationship between the non-monetary indicator and income position is very strong, the former can even be used as substitutes for the monetary poverty indicators.

As well as being used separately, groups of the ECHP based non-monetary indicators may be used simultaneously in order to examine the scale and intensity of the multiplication of disadvantages. Moreover, simultaneous use of the non-monetary and monetary indicators can help us understand poverty as a web of disadvantages in many domains of people's life and not only as a lack of financial resources. This application is not developed further here (see Eurostat 1999).

In several cases two indicators are derived from the same variable by using a different number of variable categories (for example from the variable 'main source of the household income' two indicators are derived: one using only one variable category 'the household's main source of income is unemployment benefit' and the other using a combination of two variable categories 'the household's main source of income is either unemployment benefits or other social benefits'). The rationale for combining two variable categories when constructing a non-monetary indicator lies in a larger number of sample cases who score on such an indicator which allows us to make various disaggregations (break-downs by sex, age, labour market status, etc.) without jeopardising the reliability of the figures estimated for the total country population.

When using some of the non-monetary indicators for international comparisons a disaggregation (break-down) is recommended in order to avoid risk of spurious differences. It holds for those non-monetary poverty and exclusion indicators which are (strongly) related to a household's or an individual's characteristics (for example to age, sex or household size). An example might illustrate this risk: differences between the Member States on an age-related poverty indicator (for example 'proportion of persons reporting very bad health') might largely be explained by differences in the age composition of the country population (since elderly people are more likely to have serious health problems, the Member States with a relatively large share of the elderly in the population will probably have a higher percentage of people reporting very bad health). The same risk exists when comparisons are made at national level, for instance comparisons between the persons on low income and the remaining population.

4. FURTHER WORK

The statistical scheme described above is being applied at the moment to ECHP wave 1 and 2 data. Wave 3 data will be included in the analysis from November 1999 onwards. A first 'Statistics in Focus' should become available towards the end of the year, showing the first results of the analysis.

A further examination of this preliminary set of social exclusion indicators is being conducted. This examination should identify the causes of problems with the ECHP based social exclusion indicators in some countries (inter-wave comparability and/or international comparability). It is hoped that as a result of this exercise, some firmer proposals can be made concerning the short- and long-term use of this data.

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Estatística e Investigação: Portugal no Contexto Europeo

LÍDIA BARREIROS
INE - PORTUGAL

CONTENTS

1.   INTRODUÇÃO

O objectivo da comunicação é contribuir para o actual debate sobre o percurso da investigação em Portugal nos domínios da Pobreza e Exclusão Social e suas perspectiva de evolução futura, no contexto europeu. Pretende-se realçar os factos básicos sobre aqueles fenómenos, comentá-los de forma resumida e analisar a sua dinâmica. Esta perspectiva comparativa só se tornou possível graças à realização do Inquérito Painel sobre os Rendimentos e Condições de Vida dos Agregados Familiares da União Europeia (PAUE), lançado em 1994, na maioria dos estados comunitários. A sua estrutura longitudinal torna possível seguir e entrevistar as mesmas famílias e os mesmos indivíduos ao longo de vários anos, produzindo assim informações sobre a dinâmica dos fenómenos sociais.

Investigações anteriores sobre a pobreza tinham-se baseado no padrão de despesas dos agregados familiares, pela razão prática de ser geralmente mais fiável do que os dados sobre o rendimento provenientes dos inquéritos nacionais aos orçamentos familiares, os quais eram a única fonte disponível capaz de ser usada nessas investigações. Essa restrição deixa de existir com o surgimento do PAUE, que contém dados pormenorizados, validados e ponderados sobre os rendimentos. Além disso, enquanto as despesas ou o consumo real constituem uma medida mais directa da pobreza, o rendimento salienta a noção de direitos, como, por exemplo, através do rendimento mínimo garantido numa "Europa para todos".

Pode legitimamente argumentar-se que o limiar do rendimento não mede, estritamente falando, a pobreza, mas os rendimentos baixos. Porém, como muitas carências têm a sua origem directa na falta de dinheiro, baixo rendimento é sinónimo apropriado de pobreza. Por outro lado, como se mostra a seguir, o PAUE permite, pela primeira vez a nível europeu, analisar o aspecto financeiro da pobreza relativamente às dimensões não-monetárias.

Assim, a quase totalidade das estatísticas incluídas no documento provém do PAUE, sendo completadas, para Portugal, por outras fontes de dados, sempre que estas estejam consideradas pertinentes e úteis.

A característica longitudinal do Painel permite acompanhar o movimento dos agregados e indivíduos em múltiplas vertentes de análise. Tomando por base as duas vagas do PAUE (94 e 95), conduziu-se uma análise dinâmica em duas vertentes: a mobilidade dos indivíduos, por referência à distribuição dos rendimentos e as transferências operadas entre as sub-populações pobre e não pobre.

Este documento constitui uma selecção prévia e orientada de material destinado a um relatório mais completo, actualmente em fase de preparação, sobre a distribuição dos rendimentos e pobreza em Portugal.

A apresentação das recomendações do Eurostat sobre a produção, análise e apresentação de estatísticas comparáveis sobre a distribuição do rendimento, pobreza e exclusão social constitui o objecto central da secção 2. deste estudo, por constituírem o marco de referência da investigação apresentada nesta comunicação.

Na secção seguinte (secção 3.), apresentam-se as principais potencialidades do PAUE na apreciação da distribuição do rendimento e na observação das condições de vida dos indivíduos e das famílias.

A secção 4 analisa a extensão e grau da pobreza em Portugal, numa perspectiva europeia, e oferece uma tipificação dos principais grupos sócio-económicos em situação de pobreza.

Pobreza não significa desigualdade, nem desigualdade implica necessariamente a existência de pobreza. No entanto, existe uma relação estreita entre os dois conceitos, tanto a nível político como técnico, resultante da utilização do limiar de pobreza. A distribuição do Rendimento nos países da UE é estudada na secção 5.

Como já foi referido, a pobreza é uma noção económica que se define, normalmente, em termos de escassez de recursos financeiros. Um conceito mais sociológico teria igualmente em conta privações concretas, sob a forma de carências físicas associadas. Aquela noção implica que só se contemplem as carências onde uma necessidade existe e permanece insatisfeita por falta de dinheiro. O Painel dos agregados familiares foi concebido, para esclarecer também este aspecto não-financeiro da pobreza. Na secção 6 estuda-se o conjunto de indicadores não-monetários do PAUE para compreender a natureza essencial da pobreza.

Embora os diferentes estudos e publicações até agora realizados apontem inequivocamente para elevados níveis de desigualdade e de pobreza em Portugal, eles divergem quanto aos valores apresentados para os principais indicadores. Na secção 7 tenta-se clarificar em que medida a utilização de diferentes fontes de informação, conceitos e metodologias podem explicar essas discrepâncias.

A secção 8 explora a característica longitudinal do Painel, analisando *a mobilidade dos indivíduos* por referência à distribuição do rendimento e as *transferências* operadas entre as sub-populações pobre e não pobre.

Por último, a secção 9 sumaria os principais resultados obtidos e tenta delinear as vias para um aprofundamento futuro da investigação nesta área.

2. RECOMENDAÇÕES DO EUROSTAT SOBRE AS ESTATÍSTICAS DA POBREZA E EXCLUSÃO SOCIAL

Este documento não pretende abrir a discussão sobre os conceitos e definições de pobreza, que, estritamente falando, pertencem, em última instância, ao domínio da política e da ideologia. Toma como ponto de partida a definição que figura no Terceiro Programa Comunitário de Luta contra a Pobreza contida na declaração do Conselho Europeu de 19 de Dezembro de 1984:

"Por "pobres" deve entender-se pessoas, famílias e grupos de pessoas cujos recursos (materiais, culturais e sociais) são tão limitados que os excluem do nível de vida minimamente aceitável no Estado-membro em que vivem".

Segundo esta definição, a pobreza é multidimensional e depende do nível médio de desenvolvimento de cada Estado Membro. Trata-se de uma noção relativa, que não pode ser inteiramente implementada, pelo que tem de traduzir-se numa "definição de trabalho", mesmo que arbitrária, em termos de consumo, despesa ou rendimento.

O Tratado de Amsterdão vai mais além do conceito de pobreza, explicitando o conceito de exclusão social:

"Exclusão é o processo que impede as pessoas de participarem plenamente na sociedade assim como serem socialmente integradas".

O Artigo 136 identifica o "combate à exclusão" como um dos principais objectivos da Política Social Europeia. No Artigo 137.1, a integração de pessoas excluídas do mercado de trabalho é mencionada como um dos domínios em que as acções Comunitárias devem apoiar e complementar as actividades dos Estados Membros. O Artigo 137.2 cria as condições para acção ao nível Comunitário ao encorajar cooperação que promova a troca de experiências, inovação e avaliação no combate à exclusão social.

O suporte estatístico necessário à implementação do Tratado requer informação não só sobre o rendimento monetário mas também sobre o contexto social e económico em que vive a população pobre e a incidência das medidas de política de protecção social, saúde, educação, etc. Além disso, o Programa

Comunitário de Luta contra a Exclusão Social para o período 2001-2005, em preparação, apela para o reforço de indicadores e estatísticas sobre a exclusão social, incluindo os seus aspectos dinâmicos.

Apesar da dificuldade de estabelecer para fins estatísticos o elo entre a pobreza e a exclusão social, é hoje indiscutível a necessidade de considerar a pobreza como um fenómeno multidimensional.

Para efeitos de medida, o Eurostat elaborou um conjunto de recomendações sobre a produção, análises e apresentação de estatísticas comparáveis, ao nível europeu, sobre a distribuição do rendimento, exclusão social e pobreza. Esta recomendações foram aprovadas pelo Comité de Programa Estatístico, em Novembro de 1998 e podem ser assim sumariadas:

A utilização do conceito de **rendimento disponível** para a comparação internacional de agregados e indivíduos.

i.   A utilização do conceito de **rendimento disponível** para a comparação internacional de agregados de indivíduos.

ii.   A utilização do **Painel dos Agregados Familiares** para o estudo da pobreza e exclusão social.

iii. A utilização de **limiares de pobreza** relativa definidas em relação a três níveis da mediana do rendimento.

iv.   A adopção das chamadas **escalas de equivalência** da OCDE modificadas, ou seja, 1,0 para o primeiro adulto, 0,5 para todos os outros adultos do agregado e o,3 para cada criança ou menor de 16 anos.

v.   A utilização de **indivíduos** como a "unidade de distribuição" e "unidade de análise", por razões de consistência.

vi.   A publicação de **medidas de desigualdade da distribuição de rendimento** como reforço da robustez dos indicadores de pobreza.

A definição das **componentes de exclusão social** por referência à sua de relevância política: baixos rendimentos; situação perante o mercado de trabalho; mobilidade ou transição entre classes de rendimento.

A utilização dum conjunto de **indicadores sociais**, baseados tanto quanto possível no PAUE, para a definição de exclusão social.

A publicação de relatórios de qualidade e disponibilidade de **meta-informação** conjuntamente com a publicação de análises sobre a pobreza e exclusão social.

3.   PAINEL DE AGREGADOS FAMILIARES

3.1   Potencialidades e características do Painel dos Agregados Familiares

O Painel dos Agregados Familiares consiste num inquérito anual multidimensional aos Agregados Domésticos Privados. Foi lançado em 1994 na maioria dos Estados membros, e os seus principais dados sobre o rendimento referem-se ao ano civil de 1993. O inquérito é baseado num questionário harmonizado, concebido a nível comunitário e adaptado pelos diferentes institutos nacionais de estatística às diversas realidades nacionais. O PAUE alimenta uma base centralizada de microdados comparáveis num vasto conjunto de áreas: características demográficas, mercado de trabalho, rendimentos, habitação, saúde, educação, etc. A sua estrutura longitudinal torna possível seguir e entrevistar as mesmas famílias e indivíduos ao longo de vários anos.

O PAUE possui características únicas a nível europeu enquanto instrumento de análise dos rendimentos e das condições de vida das famílias. As principais vantagens da sua utilização podem ser sumariadas nas seguintes quatro vertentes:

i. **comparibilidade** da informação a nível comunitário pela utilização dum questionário comum, harmonização dos diferentes conceitos, técnicas de validação, imputação e ponderação idênticas e uma estrutura final dos principais resultados e apuramentos estandardizados.

ii. **multi-dimensionalidade** dos aspectos analisados possibilitando estabelecer a relação entre a actividade económica dos indivíduos, os seus rendimentos e condições de vida. Em particular, a análise integrada do circuito *mercado de trabalho* $\Rightarrow$ *rendimentos* $\Rightarrow$ *condições de vida* permite identificar as principais determinantes das situações de precariedade, constituindo assim um instrumento importante na definição e implementação de políticas sociais

iii. possibilidade de proceder a **estudos longitudinais** ao nível micro-conómico viabilizando a consideração das dinâmicas de mutação social, o que permite analisar a incidência da conjuntura económica sobre as condições de vida das famílias e, eventualmente, detectar a eficácia das próprias políticas sociais. Por exemplo, a utilização do Painel permitirá não só a detecção de quais as famílias em situação de precariedade mas igualmente a sua persistência nessa situação, tornando assim possível identificar os mecanismos de "entrada" e "saída" de situações de exclusão social. Num contexto de rápida mutação social este tipo de informação é vital para uma clara percepção dos diferentes mecanismos de exclusão .

iv. **elemento estruturante** no sistema de inquéritos sociais a nível europeu e um quadro de referência, para novos passos na harmonização de indicadores sociais.

Na apreciação da relevância do Painel dos Agregados Familiares no estudo das condições de vida das famílias, é necessário ter em conta que algumas das suas principais potencialidades somente se revelarão à medida que novas "vagas" vão sendo produzidas e estudadas, alargando a possibilidade de estudos longitudinais e de detecção das diferentes dinâmicas sociais.

3.2 O Painel dos Agregados Familiares em Portugal (1995)

A segunda vaga do Painel dos Agregados Familiares portugueses foi realizada entre Outubro e Dezembro de 1995, tendo sido inquiridos 4916 agregados que englobam cerca de 15000 indivíduos. Destes, 11858[1] responderam a um questionário detalhado abrangendo questões relacionadas com a sua situação demográfica, emprego, desemprego e procura de emprego, situação laboral referente a empregos anteriores, periodicidade das suas actividade, rendimentos obtidos, nível de instrução e cursos de formação profissional que tenham frequentado, saúde, relações sociais, movimentos migratórios e ainda quanto à sua percepção subjectiva do seu nível de bem-estar.

3.3 Conceito de Rendimento utilizado

O principal conceito de rendimento até ao momento utilizado no Painel dos Agregados Familiares é o conceito de Rendimento Monetário Líquido, calculado pela agregação dos rendimentos do trabalho (trabalho por conta de outrém e por conta própria), de outros rendimentos privados (rendimentos de capital, propriedade e transferências privadas) e das pensões e outras transferências sociais recebidas. No calculo do Rendimento Monetário Líquido são englobadas todas as receitas obtidas conjuntamente pelo

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[1] Somente os indivíduos maiores de 16 anos são solicitados a responder ao questionário individual detalhado. Em relação aos restantes indivíduos é, no entanto, igualmente recolhida um conjunto de informação de natureza demográfica, necessária a uma correcta apreciação da população total abrangida pelo inquérito.

agregado e por cada um dos seus actuais membros, no ano precedente à realização do inquérito (1994 no caso da segunda vaga).

Este conceito de rendimento não tem em conta eventuais rendimentos não monetários auferidos pelo agregado (receitas em espécie, autolocação e autoconsumo, rendas imputadas associadas à habitação própria, etc.). A não consideração deste tipo de rendimentos, implica necessariamente uma subestimação do rendimento disponível das famílias em países como Portugal onde estas componentes têm ainda um peso significativo e podem conduzir a um claro enviezamento na análise da distribuição do rendimento.[2]

Não sendo inquirido directamente o valor do rendimento monetário líquido de cada um dos agregados, este é obtido pelo Eurostat a partir dos questionários detalhados dos indivíduos constantes do Painel, através do recurso a um conjunto de técnicas harmonizadas de imputação. Estas técnicas de imputação são efectuadas ao nível mais elementar de desagregação do rendimento e visam nomeadamente:

    i.   imputação do valor de um dado item de receita, quando apenas é referenciado o intervalo em que este se situa;

    ii.   estimação de um valor líquido, quando o agregado somente declara o valor bruto de um dado componente do seu rendimento;

    iii.   estimação de um valor não declarado de uma fonte de rendimento, de que o agregado declara ser titular.

Outras técnicas são igualmente utilizadas, a um nível superior de agregação, de forma a corrigir as não respostas no seio dos diferentes agregados, isto é, no caso de algum dos elementos adultos do agregado não ter respondido ao respectivo questionário detalhado.

4.   FACTOS SOBRE A POBREZA

4.1   Extensão da Pobreza

Partindo da definição da pobreza adoptada pelo Eurostat, em que se define como limiar de pobreza

"o rendimento correspondente a 60% da mediana do rendimento, traduzido em adulto equivalente"

será interessante situar os 13 países da UE face aos limiares de pobreza construídos, e que são apresentados abaixo, no Quadro 4.1, em moeda nacional e em PPA[3]. Trata-se de um valor de referência determinado para cada um dos países em análise[4].

Embora se tenha adoptado como linha de pobreza o valor correspondente a 60% do rendimento mediano apresentam-se igualmente, em anexo, outras medidas correspondentes a outras proporções da mediana (40%, 50% e 70%).

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[2]   A avaliação efectuada até ao presente no seio do Eurostat àcerca da qualidade e da fiabilidade do Painel tem permitido ilustrar algumas das limitações inerentes à não consideração de rendimentos não monetários. Actualmente está em discussão no Eurostat, em colaboração com os diferentes países participantes do Painel, a elaboração de metodologias e técnicas que permitam ultrapassar esta insuficiência. É pois provável que num futuro próximo o actual conceito de Rendimento Monetário Líquido seja substituído ou complementado por um conceito mais abrangente de Rendimento Disponível, que englobe pelo menos parcialmente, os rendimentos não monetários.

[3]   As Paridades do Poder Aquisistivo (PPA) convertem as moedas nacionais em unia des de moeda com poder de compra idêntico em todos os países, por forma a permitir o estabelecimento de comparações

[4]   Esta medida é relativizada ao quadro social padrão em cada um dos Estados Membros, isto é, um não pobre em Portugal de acordo com o limiar de pobreza especifico pode ser considerado como pobre por referência ao limiar de pobreza noutro Estado Membro.

Portugal, seguido da Grécia, apresenta o rendimento líquido por adulto equivalente mais baixo da União, exibindo o Luxemburgo o valor mais elevado, com um valor médio de mais do triplo do de Portugal. A Dinamarca, a Alemanha e a Áustria registam valores em torno de 12 000 PPA, o dobro do de Portugal.

QUADRO 4.1
LINHAS DE POBREZA, EM MOEDA NACIONAL E PPA -
Rendimento líquido por adulto equivalente (1000)

	Moeda nacional		ECU		PPA	
	Média	**Mediana**	**Média**	**Mediana**	**Média**	**Mediana**
Alemanha	29,9	26,8	15,6	14,0	13,9	12,4
Dinamarca	136,3	126,6	18,1	16,8	13,9	12,9
Holanda	28,5	25,0	13,2	11,6	12,5	11,0
Bélgica	572,0	524,0	14,4	13,2	13,7	12,6
Luxemburgo	885,8	746,1	22,3	18,8	22,3	18,8
França	96,6	84,2	14,7	12,8	13,4	11,6
Reino Unido	9,3	7,9	12,0	10,1	13,3	11,2
Irlanda	8,0	6,4	10,2	8,1	11,3	9,1
Itália	16244,4	14240,0	8,5	7,4	9,9	8,7
Grécia	1880,1	1592,1	6,5	5,5	8,4	7,1
Espanha	1192,7	1001,3	7,5	6,3	9,0	7,5
Portugal	1049,0	862,8	5,3	4,4	7,7	6,3
Áustria	203,5	183,9	15,0	13,6	13,7	12,3

Fonte: Eurostat, PAUE, segunda vaga,1995.

Na primeira coluna do Quadro 4.2 apresentam-se taxas de pobreza relativas ao ano civil de 1995 e calculadas para os limiares considerados no quadro 4.1.

A proporção do número de pobres na população total, designada por **taxa de pobreza**, para o conjunto dos 13 países[5] é de 18%. Acima desta média situam-se Portugal com a mais elevada taxa de pobreza (23.9%), Irlanda (21.4%), Grécia (20.7%) e Reino Unido (20.5%).

Com valores claramente inferiores à média encontram-se a Holanda (10.0%) e Dinamarca (10.7%). O resultado obtido para o Luxemburgo deve ser "lido" tendo em atenção que o limiar de pobreza definido é elevado o que penaliza a taxa de pobreza[6].

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[5] Este valor é construído a partir da agregação dos indivíduos pobres determinados para cada país face a um limiar de pobreza nacional.

[6] A utilização da referência 40% do rendimento mediano, valor mais aproximado ao limiar de pobreza adoptado para a generalidade dos países determinaria para o Luxemburgo uma taxa de pobreza inferior a 5%

QUADRO 4.2
MEDIDAS DE POBREZA

	Taxa de Pobreza	Severidade da Pobreza	Incidência da Pobreza
	0,1761	0,0572	0,0291
Alemanha	0,1070	0,0233	0,0088
Dinamarca	0,1003	0,0331	0,0177
Holanda	0,1795	0,0545	0,0263
Bélgica	0,1427	0,0408	0,0195
Luxemburgo	0,1584	0,0403	0,0174
França	0,2048	0,0529	0,0218
Reino Unido	0,2140	0,0487	0,0190
Irlanda	0,1874	0,0612	0,0336
Itália	0,2067	0,0705	0,0351
Grécia	0,1886	0,0527	0,0246
Espanha	0,2389	0,0792	0,0407
Portugal	0,1701	0,0537	0,0262
Áustria	0,1701	0,0537	0,0262

4.2   Grau de Pobreza

Os valores mencionados apresentam as taxas de pobreza com base em determinadas limiares de pobreza, que são, na realidade, índices *per capita* ou índices de prevalência. Mas, quão pobres são os pobres? Infelizmente, não há consenso no que respeita à metodologia a usar para incorporar o grau de pobreza numa medida global de pobreza fácil de interpretar; a escolha neste documento recai sobre as medidas FGT ou Foster-Greer-Thorbecke apresentadas em anexo.

Segundo a metodologia considerada, distinguem-se as medidas de severidade e intensidade da pobreza.

A **severidade de pobreza** é medida pelo fosso de pobreza, ou seja, a distância entre o rendimento real dos pobres e o limiar de pobreza. Obviamente, quanto maior a distância, mais severa será a pobreza do indivíduo ou agregado familiar em causa. Este indicador assume valores mais elevados quando, em termos individuais, as distâncias ao limiar de pobreza (fosso de pobreza) são mais acentuadas.

Do Quadro 4.2, verifica-se que a severidade da pobreza, varia entre 0.023 (Dinamarca) e 0.079 (Portugal). Refira-se que, para o grupo de países cuja taxa de pobreza é superior à média europeia, é em Portugal e Grécia que fosso de pobreza é mais acentuada.

A **intensidade da pobreza** é outra medida do grau de pobreza. Este indicador atribui um peso mais acentuado para maiores distâncias ao limiar de pobreza.

O indicador de intensidade da pobreza, no Quadro 4.2, vem reforçar a ideia de situação mais desfavorável no caso português pela amplitude muito mais acentuada da distância face ao limiar de pobreza.

4.3   Perfil de Pobreza

4.3.1   Tipo de Agregados

Quem são os pobres?

A resposta implica uma análise da composição dos pobres por grupos sociais. O Quadro 4.3 identifica, para o conjunto dos 13 países, os seguintes tipos de agregados como estando numa situação mais vulnerável face à pobreza: família monoparental com crianças jovens[7], pessoa só com idade inferior a 30 anos, pessoa só idosa, casais com três ou mais crianças.

QUADRO 4.3
INDIVÍDUOS EM SITUAÇÃO DE POBREZA SEGUNDO O TIPO DE AGREGADO

Categorias de Agregados	UE13		Portugal	
	Taxa pobreza	% col.	Taxa pobreza	% col.
Pessoa só com 65 ou mais anos	27,1	7,5	57,3	6,5
Pessoa só com idade entre 30-64 anos	15,0	3,3	32,0	1,7
Pessoa só com idade inferior a 30 anos	33,5	2,3	13,9	0,1
Família monoparental com 1 ou mais crianças (<16)	43,0	5,3	49,9	2,2
Família monoparental com 1 ou mais crianças (pelo menos 1 ≥ 16)	23,3	6,0	31,3	8,5
Casal sem crianças (1 pessoa com 65 ou mais anos)	19,3	8,9	44,7	15,3
Casal sem crianças (ambos com menos de 65 anos)	9,7	5,9	25,1	6,1
Casal com uma criança (criança < 16 anos)	10,4	4,9	9,5	3,6
Casal com duas crianças (crianças < 16 anos)	14,6	10,7	16,0	7,0
Casal com três ou mais crianças (crianças < 16 anos)	26,0	8,3	47,3	5,8
Casal com uma ou mais crianças (pelo menos 1 criança ≥ 16)	18,1	28,2	19,3	28,2
Outros agregados	18,8	8,8	20,5	15,2
Total	18,0	100,0	23,9	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995.

O perfil de pobreza em Portugal por referência ao tipo de agregado apresenta algumas particularidades face ao perfil médio europeu. Em Portugal, as pessoas idosas que vivem sozinhas pertencem claramente a um grupo com acentuada vulnerabilidade à situação de pobreza – mais de metade destes agregados vivem numa situação de pobreza; com taxas de pobreza perto dos 50%, os agregados monoparentais com crianças jovens, casais com três ou mais filhos jovens[8], casais sem filhos em que um dos elementos é idoso, constituem grupos de risco.

4.3.2   Fonte de Rendimento

Os pobres, considerando o conjunto de treze países, têm como origem principal do rendimento, salários e ordenados, pensões e outras prestações sociais. Salienta-se as elevadas taxas de pobreza nas situações, em que a fonte principal de rendimento corresponde a subsídios de desemprego, outras prestações sociais ou rendimento de outras fontes.

O Quadro 4.4 mostra que em Portugal, cerca de 80% dos indivíduos pobres apresentam como fonte principal do rendimento, ordenados e salários ou pensões; estes últimos, porque associados a uma elevada taxa de pobreza, constituem um grupo de risco. Igualmente, o fenómeno da pobreza incide de forma

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[7]   Crianças com menos de 16 anos

[8]   Cresce o facto de este grupo revelar peso significativo na população pobre.

muito acentuada no caso de indivíduos cuja fonte principal de rendimento é constituída por subsídios de desemprego ou outro tipo de prestações sociais.

QUADRO 4.4
INDIVÍDUOS EM SITUAÇÃO DE POBREZA SEGUNDO A PRINCIPAL FONTE DE RENDIMENTO

Origem do rendimento	UE13		Portugal	
	Taxa pobreza	% col.	Taxa pobreza	% col.
Salários e Ordenados	10,5	34,3	15,1	40,7
Rendimento do trabalho por conta própria e da agricultura	17,0	10,0	17,9	9,3
Pensões	23,2	24,7	50,3	39,1
Subsídio de desemprego	59,7	5,3	40,9	2,0
Outras prestações sociais	52,3	21,9	64,9	7,5
Rendimento de investimentos, poupança e seguros	24,3	1,5	29,5	1,0
Rendimento de outras fontes	57,1	2,3	29,4	0,5
Total	18,0	100,0	23,9	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995.

4.3.3   Posição face ao Mercado de Trabalho

Considerando a posição do indivíduo de referência de cada agregado face à actividade que desempenha, verifica-se, no Quadro 4.5 que, para o conjunto dos treze países analisados, a maioria dos que se encontram numa situação de pobreza estão inseridos em agregados cujo indivíduo de referência é activo (empregos remunerados e trabalhadores por conta de outrém). Verifica-se, no entanto, que este grupo apresenta a mais baixa taxa de pobreza. É entre os agregados cujo indivíduo de referência é inactivo, em particular reformado, que a prevalência da pobreza é mais elevada, o que vem confirmar as conclusões anteriores quanto ao tipo de agregado e principal fonte de rendimento.

QUADRO 4.5
INDIVÍDUOS EM SITUAÇÃO DE POBREZA SEGUNDO A POSIÇÃO FACE AO
MERCADO DE TRABALHO

Posição face à actividade	EU13		Portugal	
	Taxa pobreza	% col.	Taxa pobreza	% col.
Emprego remunerado	10,9	54,0	13,5	25,7
Estagiários remunerados	58,7	0,2	-	0,0
Formação	28,6	0,3	-	0,0
Emprego por conta própria	20,7	12,0	30,1	27,0
Familiar não remunerado	27,2	0,2	35,9	1,3
Estudante	46,3	1,0	11,2	0,2
Desempregado	43,6	4,3	21,0	3,6
Reformado	20,4	21,5	34,8	29,4
Domésticos	37,0	5,4	39,9	10,1
Serviço comunitário/militar	26,0	0,1	47,8	0,0
Outros inactivos	23,5	1,0	30,9	2,7
Total	18,0	100,0	23,9	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995.

Em Portugal, observa-se um padrão diferente do comunitário na distribuição da população pobre. A maioria dos pobres situa-se igualmente em agregados cujo indivíduo de referência é activo, embora em

menor proporção que na UE, distribuindo-se igualmente entre empregados por conta de outrém e empregados por conta própria. Cerca de 2/5 dos pobres situam-se em agregados cujo indivíduo de referência é economicamente inactivo, correspondendo na maioria a indivíduos em situação de reforma.

As taxas de pobreza situam-se em níveis superiores à média comunitária realçando-se pelo risco associado – elevada taxa de pobreza e forte peso na população pobre - os indivíduos reformados e empregados por conta própria.

O maior peso do emprego por conta própria na população pobre, no caso português, está ligado à importância do sector primário no conjunto da actividade económica: mais de metade dos empregados por conta própria pobres situam-se na agricultura (53%). Este facto, aliado às condições de produção e fraco desenvolvimento deste sector, origina baixos rendimentos e determina uma taxa.

5. A DISTRIBUIÇÃO DO RENDIMENTO E DESIGUALDADE

Pobreza não significa desigualdade, nem desigualdade implica necessariamente a existência de pobreza. No entanto, existe uma relação estreita entre os dois conceitos, tanto a nível político como técnico, resultante da utilização do limiar de pobreza.

5.1 ˋA distribuição do rendimento nos países da União Europeia

A abordagem deste ponto inicia-se pela análise, a partir dos Quadros 5.1.a e 5.1.b, dos decis do rendimento monetário líquido médio[9], relativamente a Portugal e aos países da União Europeia (UE).

Uma primeira constatação pode ser retirada a partir da relação existente entre os rendimentos médios do decil de topo e do decil da base. A partir deste rácio é possível percepcionar a amplitude entre os rendimentos mais elevados e os mais baixos.

Para o conjunto dos 13 países, o rendimento médio do decil do topo da distribuição é cerca de nove vezes o rendimento médio do decil da base[10]. A nível dos Estados Membros os valores deste rácio permitem constatar grandes amplitudes entre os rendimentos mais elevados e os mais baixos. **Portugal** regista o valor máximo com um rácio de **13** (contra um valor mínimo de **5** apurado para a Dinamarca).

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[9] Toda a análise a nível de rendimento baseia-se na noção de **distribuição individual** do rendimento por adulto equivalente. Trata-se de um conceito que utiliza como variável o rendimento equivalente e como unidade de análise o indivíduo. A distribuição individual corresponde assim à transformação da variável rendimento total do agregado em rendimento equivalente do agregado (escala de equivalência modificada da OCDE) e posterior atribuição do rendimento equivalente do agregado a cada indivíduo que o integra.

[10] Considerou-se a distribuição conjunta de todos os países.

QUADRO 5.1.A
RENDIMENTO MÉDIO DOS AGREGADOS POR DECIS (1000 PPA)

Decis	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
1	3,71	5,95	4,40	4,07	6,93	4,44	3,93	3,39	2,48	1,94	2,50	1,62	3,93
2	6,98	8,61	7,25	6,94	11,31	6,82	5,97	4,84	4,76	3,59	4,15	3,01	6,95
3	8,85	10,24	8,35	8,60	13,69	8,27	7,34	5,80	5,91	4,69	5,13	3,90	8,63
4	10,37	11,32	9,27	10,20	15,67	9,60	8,72	6,83	6,99	5,67	6,05	4,88	10,23
5	11,72	12,37	10,34	11,79	17,67	10,92	10,33	8,22	8,09	6,63	7,04	5,83	11,61
6	13,15	13,50	11,62	13,33	20,09	12,43	12,08	9,90	9,33	7,64	8,11	6,79	13,05
7	14,83	14,59	13,12	15,08	22,82	14,18	14,15	11,80	10,81	8,89	9,46	7,84	14,65
8	17,03	16,16	15,04	17,05	26,90	16,40	16,68	14,13	12,58	10,52	11,24	9,34	16,78
9	20,49	18,49	17,83	20,01	33,04	19,71	20,32	17,59	14,96	13,02	13,89	12,12	19,93
10	31,40	27,94	27,56	30,22	54,05	30,85	33,58	30,47	23,12	21,40	21,99	21,27	30,75
Total	13,85	13,92	12,48	13,73	22,26	13,36	13,31	11,30	9,91	8,40	8,96	7,67	13,66

QUADRO 5.1.B
RENDIMENTO MÉDIO DOS AGREGADOS POR DECIS – DESVIO FACE À MÉDIA

Decis	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
1	26.79	42.73	35.24	29.62	31.15	33.24	29.54	29.99	24.99	23.04	27.90	21.11	28.80
2	50.38	61.87	58.07	50.55	50.79	51.04	44.81	42.85	48.09	42.79	46.32	39.20	50.87
3	63.89	73.57	66.87	62.65	61.48	61.90	55.09	51.28	59.69	55.81	57.23	50.86	63.17
4	74.84	81.27	74.27	74.25	70.40	71.81	65.53	60.44	70.55	67.54	67.55	63.68	74.88
5	84.59	88.84	82.84	85.85	79.37	81.70	77.62	72.70	81.65	78.90	78.54	76.05	85.03
6	94.93	96.96	93.11	97.04	90.25	93.04	90.75	87.63	94.15	90.97	90.48	88.52	95.54
7	107.05	104.77	105.12	109.80	102.49	106.11	106.26	104.42	109.16	105.81	105.59	102.26	107.29
8	122.90	116.04	120.48	124.19	120.86	122.68	125.31	125.00	127.05	125.28	125.46	121.86	122.85
9	147.86	132.80	142.89	145.73	148.40	147.45	152.63	155.66	151.08	154.96	154.95	158.04	145.90
10	226.64	200.68	220.77	220.03	242.79	230.86	252.21	269.58	233.37	254.76	245.43	277.32	225.16
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Na figura 5.1 representou-se simultaneamente este rácio e o PIB per capita expresso em PPA. Isolam-se três grupos de países: Portugal e Grécia com uma posição desfavorável (maior amplitude e menor PIB per capita); Itália, Reino Unido, Irlanda e Espanha com valores em torno da média comunitária e os restantes com uma posição favorável.

FIGURA 5.1
AMPLITUDE ENTRE DECIS EXTREMOS E PIB PER CAPITA
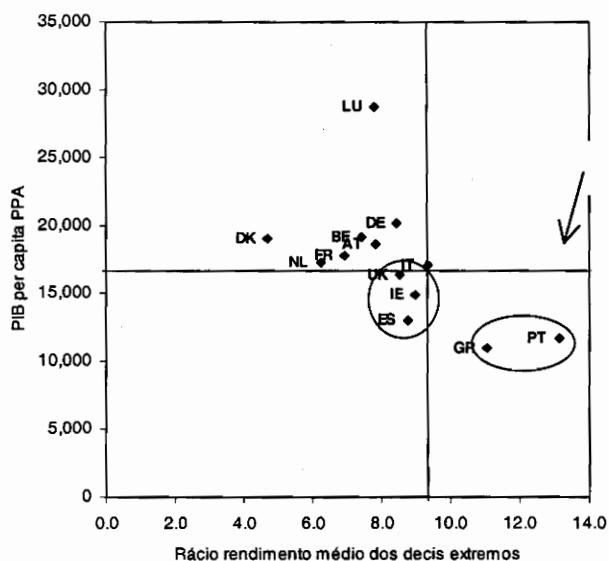
Os quadros 5.2a e 5.2b apresentam respectivamente a proporção do rendimento médio por adulto equivalente distribuído a cada decil e a proporção acumulada até cada decil, fornecendo uma visão rápida da distribuição do rendimento.

Duas situações permitem percepcionar a não proporcionalidade na distribuição do rendimento:

i.   os **20% dos agregados mais pobres** recebem entre 6% e 10,5% do rendimento (respectivamente Portugal e Dinamarca); a Grécia (6,6%) apresenta alguma similaridade à situação portuguesa, enquanto a Holanda (9,3%) apresenta alguma proximidade à Dinamarca;

ii.   os **20 % dos agregados mais ricos** recebem entre 33, 4% e 43,7% do rendimento (respectivamente Dinamarca e Portugal).

5.2   A distribuição do Rendimento para o conjunto da UE

Analisou-se no ponto anterior a distribuição do rendimento a nível de cada um dos países. Um resultado interessante, pelo que pode revelar quanto à assimetria da distribuição existente no seio da UE, pode ser obtido se se considerar a distribuição do rendimento para o conjunto da população dos treze países (a UE como um todo).

O quadro 5.3 apresenta a distribuição individual do rendimento por adulto equivalente por decis tomando por referência o conjunto dos indivíduos na UE13. Confirmando a análise anterior, verifica-se que mais de metade da população dos países do sul da Europa se situa abaixo do rendimento mediano da distribuição comunitária. No caso de Portugal este valor atinge os 80%. Refira-se ainda que cerca de um terço dos indivíduos em Portugal se situa no primeiro decil da distribuição conjunta.

QUADRO 5.2.A
RENDIMENTO MÉDIO POR ADULTO EQUIVALENTE POR DECIL (PPA) [5] - INCOME SHARE

Decis	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
1	2.68	4.26	3.52	2.96	3.11	3.32	2.95	2.99	2.50	2.30	2.79	2.11	2.88
2	5.04	6.21	5.81	5.05	5.02	5.11	4.48	4.28	4.81	4.27	4.64	3.92	5.02
3	6.39	7.36	6.68	6.25	6.22	6.19	5.51	5.13	5.97	5.59	5.71	5.08	6.40
4	7.47	8.05	7.42	7.45	6.99	7.18	6.55	6.03	7.05	6.75	6.76	6.38	7.44
5	8.46	8.96	8.28	8.58	7.97	8.18	7.77	7.28	8.16	7.89	7.86	7.59	8.56
6	9.49	9.69	9.33	9.67	9.03	9.30	9.08	8.77	9.42	9.07	9.05	8.86	9.54
7	10.71	10.44	10.51	11.00	10.23	10.61	10.63	10.45	10.92	10.60	10.53	10.18	10.73
8	12.28	11.60	12.03	12.38	11.96	12.27	12.51	12.48	12.67	12.54	12.56	12.17	12.30
9	14.80	13.33	14.27	14.63	14.88	14.74	15.28	15.58	15.13	15.49	15.46	15.82	14.57
10	22.67	20.11	22.13	22.02	24.59	23.11	25.25	27.00	23.36	25.49	24.64	27.89	22.57
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

QUADRO 5.2.B
RENDIMENTO MÉDIO POR ADULTO EQUIVALENTE POR DECIL (PPA) [11] - CURVA DE LORENZ

Decis	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
1	2.68	4.26	3.52	2.96	3.11	3.32	2.95	2.99	2.50	2.30	2.79	2.11	2.88
2	7.72	10.46	9.33	8.01	8.13	8.43	7.43	7.27	7.31	6.57	7.42	6.03	7.90
3	14.11	17.83	16.01	14.26	14.35	14.62	12.94	12.41	13.28	12.17	13.13	11.11	14.30
4	21.58	25.88	23.43	21.71	21.34	21.79	19.49	18.44	20.33	18.92	19.90	17.49	21.74
5	30.05	34.83	31.71	30.29	29.31	29.98	27.26	25.72	28.50	26.81	27.76	25.08	30.30
6	39.54	44.53	41.05	39.96	38.34	39.28	36.34	34.49	37.91	35.88	36.81	33.94	39.84
7	50.25	54.96	51.56	50.97	48.57	49.89	46.96	44.94	48.83	46.48	47.34	44.12	50.57
8	62.53	66.57	63.59	63.35	60.54	62.15	59.47	57.42	61.51	59.02	59.90	56.30	62.87
9	77.33	79.89	77.87	77.98	75.41	76.89	74.75	73.00	76.64	74.51	75.36	72.11	77.43
10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

QUADRO 5.3
DISTRIBUIÇÃO INDIVIDUAL DO RENDIMENTO EQUIVALENTE ECHP13, 1994, PPC; DISTRIBUIÇÃO DA POPULAÇÃO (% DE INDIVÍDUOS) POR DECIS E POR PAÍSES

	1	2	3	4	5	6	7	8	9	10	Total	% acima da mediana	% da População (UE13)
Luxemburgo	2,7	0,6	1,5	3,1	4,1	6,4	7,9	12,5	19,3	41,9	100,0	88,0	0,1
Dinamarca	1,6	3,3	5,5	6,8	10,0	15,9	17,1	16,9	14,6	8,3	100,0	72,8	1,5
Alemanha	7,1	4,6	7,0	7,7	9,8	12,0	12,1	12,9	13,0	13,8	100,0	63,8	23,0
Áustria	6,4	5,3	7,2	8,9	9,1	11,5	13,3	11,6	14,4	12,3	100,0	63,1	2,2
Bélgica	5,7	6,1	7,1	8,9	9,4	10,3	12,0	13,3	14,8	12,4	100,0	62,9	2,8
França	4,4	7,3	9,0	10,1	11,6	10,7	10,9	11,5	12,3	12,1	100,0	57,5	16,2
Reino Unido	6,6	10,7	10,3	9,8	9,0	9,1	9,1	10,3	11,5	13,7	100,0	53,7	16,4
Holanda	4,6	4,1	9,9	14,4	13,8	12,0	11,6	10,8	10,4	8,5	100,0	53,3	4,3
Irlanda	11,9	18,4	11,4	8,3	8,7	8,2	7,8	8,1	8,5	8,8	100,0	41,3	1,0
Itália	13,6	14,8	12,5	12,4	10,1	9,2	9,3	7,5	6,1	4,5	100,0	36,6	15,8
Espanha	19,9	17,7	13,7	10,8	9,6	7,5	6,6	5,8	4,1	4,3	100,0	28,3	10,9
Grécia	24,5	17,5	13,3	10,9	9,1	7,0	5,8	4,6	4,5	2,9	100,0	24,8	2,9
Portugal	32,1	18,0	13,7	9,9	7,0	4,7	3,8	3,8	3,3	3,8	100,0	19,4	2,2
Total (EU13)	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	100,0	-	100,0

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[11] Fonte: EUROSTAT, Painel de Agregados da União Europeia (PAUE), segunda vaga, 1995; Rendimento monetário líquido anual por adulto equivalente; escala de equivalência modificada da OCDE ; Valores em PPA ; Unidade de observação: indivíduo; dados ponderados

QUADRO 5.4
MEDIDAS DE DESIGUALDADE

Indicadores	Alemanha	Dinamarca	Holanda	*Bélgica*	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
Y médio	13.85	13.92	12.48	13.73	22.26	13.36	13.31	11.30	9.91	8.40	8.96	7.67	13.66
P_{90}/P_{10}	3,92	2,65	3,04	3,72	3,72	3,74	4,40	4,55	4,11	5,11	4,36	5,64	3,82
S_{80}/S_{20}	4,85	3,20	3,90	4,57	4,85	4,49	5,45	5,85	5,27	6,23	5,40	7,25	4,70
GINI	0.2944	0.2267	0.2697	0.2866	0.3078	0.2934	0.3320	0.3545	0.3127	0.3418	0.3253	0.3706	0.2899
ATKIN $\varepsilon=1.0$	0.1485	0.0886	0.1248	0.1408	0.1547	0.1398	0.1724	0.1916	0.1716	0.1902	0.1699	0.2214	0.1427
ATKIN $\varepsilon=1.5$	0.2271	0.1294	0.1909	0.2165	0.2258	0.2109	0.2502	0.2717	0.2724	0.2810	0.2541	0.3294	0.2178
ATKIN $\varepsilon=2.0$	0.3135	0.1719	0.2695	0.3020	0.3003	0.2987	0.3298	0.3490	0.3977	0.3734	0.3463	0.4440	0.3017

ORDENAÇÃO

Indicadores	Alemanha	Dinamarca	Holanda	*Bélgica*	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
Y médio	3	2	8	4	1	6	7	9	10	12	11	13	5
P_{90}/P_{10}	7	1	2	3	4	5	10	11	8	12	9	13	6
S_{80}/S_{20}	7	1	2	4	6	3	10	11	8	12	9	13	5
GINI	6	1	2	3	7	5	10	12	8	11	9	13	4
ATKIN $\varepsilon=1.0$	6	1	2	4	7	3	10	12	9	11	8	13	5
ATKIN $\varepsilon=1.5$	7	1	2	4	6	3	8	10	11	12	9	13	5
ATKIN $\varepsilon=2.0$	7	1	2	6	4	3	8	10	12	11	9	13	5

Fonte: EUROSTAT, PAUE, segunda vaga,1995.

Dos resultados da análise da desigualdade do Quadro 5.4, utilizando os indicadores apresentados em anexo relativos às medidas de desigualdade (decil ration; share ratio, índice de Gini, índice de Atkinson) retiram-se as seguintes conclusões:

i. A relação entre o níveis de rendimento, acima do qual se situam os 10 % mais ricos e abaixo do qual estão os 10% mais pobres, é muito acentuada no caso de Portugal (7.25) e Grécia (6.23); Dinamarca (3,2) e Holanda (3,9) apresentam os menores valores neste rácio.

ii. rácio entre as parcelas de rendimento distribuído aos 20% de indivíduos que se situam nos extremos da distribuição situa-se entre 3 (Portugal) e 1.8 (Dinamarca).

iii. A desigualdade medida pelo índice de Gini, revela para Portugal o nível mais acentuado entre os 13 países (G=0.37), seguindo-se a Irlanda e a Grécia respectivamente com 0.35 e 0.34; a Dinamarca (G=0,23) é o Estado Membro em que se regista o menor índice de desigualdade na repartição do rendimento.

iv. A desigualdade medida pelo índice de Atkinson vem confirmar o resultado obtido através do índice de Gini; Portugal posiciona-se na situação mais desfavorável enquanto a Dinamarca apresenta o menor índice de desigualdade.

v. A análise da sensibilidade do índice de Atkinson face aos diferentes valores seleccionados para o parâmetro de aversão à desigualdade, evidencia movimentos na ordenação de alguns países em termos do seu nível relativo de desigualdade. À medida que o parâmetro de aversão à desigualdade aumenta, a posição relativa da Itália e da Bélgica deterioram-se

podendo indiciar que nestes países o fenómeno da desigualdade se encontra mais associado à desigualdade dos rendimentos situados na parte inferior da distribuição. Situação inversa ocorre no Luxemburgo, Reino Unido e na Irlanda.

6.   INDICADORES DE PRIVAÇÃO

A pobreza é uma noção económica que se define, normalmente, em termos de escassez de recursos financeiros. Um conceito mais sociológico teria igualmente em conta privações concretas, sob a forma de carências físicas associadas.   Aquela noção implica que só se contemplem as carências onde uma necessidade existe e permanece insatisfeita por falta de dinheiro.

A análise da pobreza baseando-se no nível de rendimento pode ser complementada por alguns indicadores não monetários, *indicadores de privação*, que expressem carências forçadas pela ausência de recursos financeiros para as satisfazer.

Na interpretação destes indicadores deve-se, no entanto, ter em conta algumas limitações que decorrem da sua natureza subjectiva e da especificidade das realidades sociais em presença.

Para a análise dos indicadores de privação escolheram-se três domínios que se afiguram relevantes: o acesso a bens duradouros, as condições do alojamento e a capacidade financeira. Estes indicadores são apresentados para os agregados.

A análise foi conduzida de forma a conjugar os indicadores de privação com os resultados do ponto anterior que permitiram identificar com base numa medida objectiva os agregados pobres.

No Quadro 6.1 apresentam-se os indicadores de privação para o conjunto dos agregados e para a sub-população de agregados identificados como pobres face ao limiar de pobreza adoptado (60% do rendimento mediano). O rácio entre o índice de privação encontrado nos agregados pobres e o mesmo índice no conjunto dos agregados corresponde a um indicador normalizado da intensidade de privação na população pobre.

QUADRO 6.1
INDICADORES DE PRIVAÇÃO

	Total de agregados		Agregados Pobres		Intensidade de Privação	
	UE13	Portugal	UE13	Portugal	UE13	Portugal
POSSE DE BENS DURADOUROS						
Automóvel	27,0	42,0	45,4	70,4	1,7	1,7
Televisão	4,0	12,0	8,3	29,6	2,1	2,5
Vídeo gravador	38,0	51,2	80,7	52,2	2,1	1,0
Micro-ondas	57,7	86,6	69,1	97,1	1,2	1,1
Máquina de lavar loiça	71,3	82,9	84,2	96,7	1,2	1,2
Telefone	7,1	23,2	15,2	45,1	2,1	1,9
Segunda habitação	93,6	90,1	96,1	96,9	1,0	1,1

CONDIÇÕES DO ALOJAMENTO

Água quente	5,2	21,7	9,9	45,9	1,9	2,1
Aquecimento	20,5	89,9	32,0	95,8	1,6	1,1
Falta de espaço	16,4	30,4	20,6	32,9	1,3	1,1
Telhado que mete água	5,8	16,8	9,0	27,3	1,6	1,6
Paredes húmidas	12,2	33,8	17,5	44,4	1,4	1,3
Crime e vandalismo na zona	18,2	21,4	19,2	12,5	1,1	0,6

CAPACIDADE FINANCEIRA

Incapacidade orçamental de responder a compromissos	46,1	78,5	68,0	92,7	1,5	1,2
Impossibilidade de fazer férias	30,3	60,0	54,9	88,4	1,8	1,5
Impossibilidade de fazer uma refeição de carne/peixe (2 em 2 dias)	6,2	6,5	13,8	16,5	2,2	2,5
Impossibilidade de convidar amigos para uma refeição/bebida	15,1	22,0	29,6	40,7	2,0	1,9
Dificuldade de pagar encargos com o alojamento	2,7	1,1	5,5	1,9	2,0	1,7
Dificuldades na amortização de hipotecas	1,3	0,7	1,7	0,9	1,3	1,3
Impossibilidade de constituição de poupança	58,2	84,4	79,3	94,7	1,4	1,1
Agravamento da situação financeira actual	31,1	34,0	34,1	38,1	1,1	1,1

Fonte: Eurostat, PAUE, segunda vaga,1995

6.1 Posse de bens duradouros

Considerando o universo do total de agregados, a segunda residência, o micro ondas e a máquina de lavar roupa são, de entre os bens inquiridos, aqueles que registam os mais elevados índices de privação, quer em Portugal, quer na UE13. A segunda residência tem a particularidade de ser o único bem duradouro onde o índice de privação é mais elevado na UE13 (93,6%) do que em Portugal (90,1%); em todos os restantes bens Portugal surge distante da média europeia.

Para o universo dos agregados pobres, como seria de esperar, os índices de privação aumentam claramente em relação a quase todos os bens, sendo que os três bens com os mais elevados níveis de privação se mantém quer na UE13 quer em Portugal. Entre os bens duradouros o vídeo gravador destaca-se por dois motivos: por um lado, para Portugal, o índice de privação é praticamente idêntico, quer para o total de agregados, quer para a sub-população de agregados pobres - o que origina um rácio de intensidade da privação praticamente igual a um. Por outro lado, para os agregados pobres, este é o único bem onde os níveis de privação são mais elevados na UE13 (80,7%) do que em Portugal (52,2%).

Analisando a intensidade da privação[12] verifica-se foi particularmente forte nos agregados pobres da UE13 em relação ao acesso à Televisão, Vídeo Gravador, Telefone e Automóvel. Em Portugal destacam-se os mesmos bens com excepção do vídeo gravador.

6.2 Condições do alojamento

Os mais elevados índices de privação no total de agregados da UE13 registam-se ao nível do aquecimento (20,5%), do crime e vandalismo (18,2%) e da falta de espaço (16,4%). Em Portugal é também o aquecimento (89,9%) que surge com o mais elevado índice, seguindo-se-lhe a existência de humidade no alojamento (33,8%) e a falta de espaço no alojamento (30,4%). Sublinha-se o facto dos

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[12] Indicador normalizado da intensidade de privação utilizado: rácio entre o índice de privação encontrado nos agregados pobres e o mesmo índice no conjunto dos agregados.

índices de privação surgirem em níveis bastante mais elevados para Portugal em relação a todos os itens inquiridos de condições do alojamento.

Entre os agregados pobres os índices de privação mais elevados indicam exactamente as mesmas condições de vida quando se considera a informação da UE13. Para Portugal registam-se alterações importantes nas principais carências quando comparamos o total com a sub-população de pobres: o aquecimento (95,8%) mantém-se como a principal dificuldade, sendo seguida da ausência de água quente (45,9%) e da existência de humidade (44,4%). O crime e vandalismo na zona merece um destaque especial por duas razões. Por um lado, é o único item de condições de vida que têm um índice de privação superior entre o total de agregados portugueses (21,4%) do que entre a sub-população dos agregados pobres (12,5%). Por outro lado é o único item onde o índice de privação é maior na UE13 do que em Portugal (para a sub-população dos agregados pobres).

Quanto à intensidade da privação, os agregados pobres sofrem de privação mais intensa do que o total de agregados em relação à inexistência de água quente destaca-se quer na UE13 quer em Portugal. Problemas com infiltrações de água no telhado do alojamento são também importantes na UE13 e em Portugal no que respeita à intensidade. Na UE13 salienta-se ainda o aquecimento enquanto em Portugal o destaque seguinte vai para as existência de humidade.

6.3   Capacidade Financeira

Quanto a este domínio a impossibilidade de constituir poupança, a incapacidade orçamental de responder a compromissos e a impossibilidade de fazer férias são os três itens que registaram os mais elevados valores para o índice de privação tanto na UE13 como em Portugal, quer considerando o universo do total de agregados quer considerando apenas os agregados pobres. Em quase todos os item os níveis de privação são consideravelmente superiores em Portugal[13], contudo, destacam-se duas excepções, curiosamente, nos itens onde os índices de privação mais se aproximam da inexistência de privação: a dificuldade de pagar encargos com o alojamento é menor em Portugal, bem como, a dificuldade na amortização de hipotecas. Como se disse e parece oportuno sublinhar neste ponto, este tipo de informação tem de ser compreendida à luz das diferenças culturais e sociológicas que poderão escapar a este análise descritiva.

Os itens que em que os agregados pobres sentem com mais intensidade a privação também são comuns entre a UE13 e Portugal, a saber:

i.   Impossibilidade de fazer uma refeição de carne/peixe (2 em 2 dias);

ii.   Impossibilidade de convidar amigos para uma refeição/bebida;

iii.   Dificuldade de pagar encargos com o alojamento.

7.   CONFRONTO ENTRE O PAINEL DOS AGREGADOS FAMILIARES E O INQUÉRITO DOS ORÇAMENTOS FAMILIARES

O objectivo desta secção é o de avaliar a consistência de resultados entre o Painel dos Agregados Familiares (PAUE 1995) e o Inquérito aos Orçamentos Familiares (IOF 94/95), na análise da distribuição do rendimento, da desigualdade e da pobreza.

Ao proceder ao confronto entre estas duas fontes de informação, há que ter em conta não somente as diferenças resultantes de estarmos perante amostras distintas (e de diferente dimensão[14]), mas

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[13]   A análise é comum aos agregados como um todo e à sub-população dos agregados pobre.

[14]   O Inquérito aos Orçamentos Familiares 1994/95 inquire 10554 ADPs que englobam 32124 indivíduos

igualmente perante conceitos e metodologias diferenciadas. Assim, desse confronto, não emana necessariamente a escolha de um deles como instrumento privilegiado para o estudo das condições de vida das famílias. A identificação e a percepção das diferenças existentes entre os dois inquéritos pode, contudo, constituir um passo significativo para um aperfeiçoamento futuro de ambos.

A estrutura dos rendimentos representada em cada um dos inquéritos e os níveis de desigualdade e pobreza são objecto de análise detalhada nesta secção.

7.1   Estrutura dos Rendimentos

Embora a estrutura por regiões se apresente muito próxima os dois inquéritos revelam, contudo, diferenças acentuadas quanto à importância relativa dos agregados e indivíduos habitando em regiões rurais e urbanas. Do Quadro 7.1 verifica-se que o IOF confere inequivocamente um maior peso às populações rurais do que o PAUE. Esta divergência na estrutura da população não poderá deixar de se reflectir, como veremos, na própria estrutura dos rendimentos.

QUADRO 7.1
TIPOLOGIA RURAL/URBANO
(%)

	Agregados		Indivíduos	
	PAUE	**IOF**	**PAUE**	**IOF**
Urbano	63.2	55.8	63.9	55.8
Semi-Urbano	22.2	26.0	23.5	27.5
Rural	14.7	18.2	12.6	16.8
População Total	100.0	100.0	100.0	100.0

Para se comparar a principal fonte de rendimento dos agregados, é necessário ter em conta que o IOF regista não somente os rendimentos monetários, mas igualmente os rendimentos não monetários. De forma a garantir a comparabilidade entre os dois conceitos, construíram-se no IOF duas categorias referentes à principal fonte de receita. A primeira tem exclusivamente em conta os rendimentos monetários do agregado, sendo portanto, directamente comparável com a do PAUE. A segunda tem em conta todos os tipos de rendimento apurados no IOF.

QUADRO 7.2
PRINCIPAL FONTE DE RECEITA DO ADP
(%)

	Agregados			Indivíduos		
	PAUE	**IOF-RM**	**IOF-RT**	**PAUE**	**IOF-RM**	**IOF-RT**
Salários e Ordenados	55.2	48.9	46.7	64.1	58.3	55.8
Rends.Trabalho C/Própria	10.6	13.5	11.7	12.3	15.9	13.9
Pensões	28.0	31.9	28.9	18.4	20.7	18.9
Subsídio Desemprego	1.2	1.1	1.0	1.2	1.1	1.0
Benefícios Sociais	3.3	0.3	0.3	2.7	0.4	0.3
Rends. de Propriedade	1.2	1.8	1.4	0.8	1.4	1.1
Outros Rendimentos	0.5	2.4	10.1	0.4	2.2	9.1
População Total	100.0	100.0	100.0	100.0	100.0	100.0

Como se pode observar no quadro anterior, o PAUE apresenta uma maior percentagem da população vivendo em agregados cuja principal fonte de rendimento é o trabalho por conta de outrém, o que eventualmente pode estar associado ao maior peso de famílias urbanas no Painel. Quando se compara a estrutura da população do Painel com a estrutura equivalente do IOF (*IOF-RM*), nota-se igualmente uma maior percentagem da população do PAUE em agregados cuja fonte de rendimento predominante são os Benefícios Sociais. Uma maior atenção no âmbito do Painel á inquirição dos diversos tipos de transferências sociais pode constituir uma explicação plausível para as diferenças encontradas nesta rubrica nos dois inquéritos.

Se tivermos em conta todas os items do rendimento inquiridos no IOF (*IOF-RT*), então o número de agregados e de indivíduos cuja principal fonte de rendimento aparece na categoria "Outros Rendimentos", sobe para 9-10%, permitindo antecipar a importância que os rendimentos não monetários têm no rendimento familiar.

Ao confrontar a estrutura dos rendimentos entre o PAF e o IOF, é necessário ter em conta o diferente conceito de rendimento agregado, subjacente a cada um dos inquéritos. Como vimos o conceito base do Painel é o de Rendimento Monetário Líquido dos Agregados, enquanto que no Inquérito aos Orçamentos Familiares, o conceito base é o de Receita Líquida Total, englobando quer os rendimentos monetários quer os rendimentos não monetários. De forma a assegurar a comparabilidade da análise, o Quadro 7.3 apresenta três estruturas do rendimento dos agregados:

i.   a estrutura dos rendimentos monetários do Painel;

ii.   a estrutura dos rendimentos monetários do IOF (IOF-RM), compatível com a do PAF;

iii.   a estrutura dos rendimentos totais do IOF (IOF-RT)

QUADRO 7.3
ESTRUTURA DOS RENDIMENTOS DOS AGREGADOS

Tipo de Rendimento	PAUE	(%)	IOF-RM	(%)	IOF-RT	(%)
Salários e Ordenados	1284.3	63.5	1123.2	55.9	1123.2	45.8
Rends.Trabalho Conta Própria	222.2	11.0	302.7	15.1	302.7	12.3
Rendimentos do Trabalho	1506.5	74.4	1425.8	70.9	1425.8	58.1
Rendimentos de Capital	36.4	1.8	24.6	1.2	24.6	1.0
Rendimentos de Propriedade	15.9	0.8	33.9	1.7	33.9	1.4
Transferências Privadas	9.5	0.5	68.0	3.4	68.0	2.8
Rendimentos Privados	61.8	3.1	126.5	6.3	126.5	5.2
Subsídio Desemprego	30.1	1.5	33.6	1.7	33.6	1.4
Pensões Reforma/Sobrevivência	351.9	17.4	391.6	19.5	391.6	16.0
Subsídios Familiares	30.7	1.5	19.1	1.0	19.1	0.8
Subsídios Doença/Invalidez	37.5	1.9	7.1	0.4	7.1	0.3
Subsídios relacionados c/Educação	2.1	0.1	2.4	0.1	2.4	0.1
Outros Benefícios	2.9	0.1	4.5	0.2	4.5	0.2
Assistência Social	0.2	0.0	0.0	0.0	0.0	0.0
Subsídios relacionados c/alojamento	0.2	0.0	0.0	0.0	0.0	0.0
Transferências Sociais	455.4	22.5	458.3	22.8	458.3	18.7
Rendimento Monetário Líquido	2023.7	100.0	2010.6	100.0	2010.6	82.0
Salários em Natureza	(-)		(-)		20.2	0.8
Autoconsumo/Autoabastecimento	(-)		(-)		67.7	2.8
Autolocação	(-)		(-)		263.1	10.7
Outros Rendimentos n/monetários	(-)		(-)		90.4	3.7
Rendimentos não Monetários	(-)		(-)		441.4	18.0
Rendimento Total Líquido	(-)		(-)		2452.0	100.0

Uma primeira constatação é a de que o rendimento monetário líquido dos agregados obtido em ambos os inquéritos é muito semelhante, cerca de 2000 contos/ano. O facto de o desvio entre os dois inquéritos ser inferior a 1%, não pode deixar de constituir um indicador positivo quanto à coerência entre as duas fontes de informação e quanto à representatividade dos valores observados.

Um segundo aspecto que emerge da observação do Quadro 7.3, é o maior peso relativo dos rendimentos do trabalho por conta de outrém na estrutura dos rendimentos monetários do Painel. Este facto, consistente com a análise anteriormente efectuada da distribuição da população de acordo com a principal fonte do rendimento do agregado, justifica uma investigação futura mais detalhada das causas que o determinam, nomeadamente, ao nível da construção das amostras para os dois inquéritos.

Um último aspecto a realçar é a importância dos rendimentos não monetários no Rendimento Líquido Total dos agregados. De acordo com o IOF, estes rendimentos representavam em 1994 18% do rendimento total, pelo que a sua não consideração no Painel implica uma clara sub-avaliação dos recursos auferidos pela população, com consequências óbvias sobre o seu nível de bem-estar.

7.2 Níveis de Desigualdade e de Pobreza

As diferenças verificadas nas estruturas da população e dos rendimentos entre os dois inquéritos, não podem deixar de se reflectir na distribuição do rendimento entre os diferentes indivíduos e nas diferentes medidas de desigualdade e de pobreza.

Retomando a distribuição individual do rendimento por adulto equivalente, os Quadros 7.4 a 7.5 apresentam os diversos indicadores quanto à distribuição do rendimento, a desigualdade e a pobreza.

QUADRO 7.4
PROPORÇÃO DO RENDIMENTO TOTAL AUFERIDA POR CADA DECIL

	PAUE	IOF-RM	IOF-RT
1º Decil	0.02111	0.02766	0.02973
2º Decil	0.03916	0.04230	0.04415
3º Decil	0.05079	0.05302	0.05512
4º Decil	0.06381	0.06422	0.06468
5º Decil	0.07593	0.07472	0.07446
6º Decil	0.08865	0.08618	0.08624
7º Decil	0.10177	0.10050	0.09972
8º Decil	0.12174	0.11876	0.11915
9º Decil	0.15818	0.15229	0.15310
10º Decil	0.27887	0.28036	0.27364

QUADRO 7.5
MEDIDAS DE DESIGUALDADE

	PAF	IOF-RM	IOF-RT
"Decile Ratio" (P90 / P10)	5.63921	4.93145	4.69922
"Share Ratio" (S80 / S20)	7.25143	6.18499	5.77587
Índice de Gini	0.37064	0.35749	0.34713
Índice de Atkinson ε=1.0	0.22139	0.19429	0.18150
Índice de Atkinson ε=1.5	0.32938	0.27443	0.25452
Índice de Atkinson ε=2.0	0.44404	0.35185	0.32032

QUADRO 7.6
MEDIDAS DE POBREZA (60% DA MEDIANA)

	PAUE	IOF-RM	IOF-RT
Limiar de Pobreza	517.68	499.10	608.52
Taxa de Pobreza (α=0)	0.238932	0.203907	0.180466
Severidade da Pobreza (α=1)	0.079179	0.053664	0.046198
Intensidade da Pobreza (α=0)	0.040734	0.021675	0.017508

A principal conclusão que se pode retirar dos quadros anteriores é a de que, de forma sistemática e consistente, o Painel apresenta indicadores de desigualdade e de pobreza mais elevados do que o IOF.

Ao compararmos a distribuição do rendimento monetário entre os dois inquéritos verifica-se que o Painel apresenta um nível de desigualdade, medido pelo Índice de Gini, que é cerca de ponto e meio percentual superior ao registado no IOF. Os diferentes valores do Índice de Atkinson confirmam este desvio, evidenciando ainda que este se torna mais importante para valores superiores de ε. O comportamento sugerido pelo Índice de Atkinson é o de que o agravamento da desigualdade no Painel pode encontrar uma explicação, ainda que parcial, num mais baixo rendimento relativo dos primeiros decis da distribuição do PAF, comparativamente aos do IOF. A observação da proporção do rendimento total auferida por cada decil (Quadro 7.4) permite confirmar esta explicação.

No que concerne à taxa de pobreza, e considerando o valor de referência de 60% do rendimento mediano como limiar de pobreza, o Painel regista igualmente uma maior proporção de indivíduos pobres: 23.9% da população comparativamente aos 20.4% estimados no IOF.

Uma explicação possível para uma maior desigualdade e níveis de pobreza na distribuição individual do rendimento monetário por adulto equivalente no Painel, radica na estrutura dos rendimentos nos dois inquéritos. Em estudo anterior[15] demonstrámos que as desigualdade salariais em Portugal tinham um impacto na desigualdade total mais do que proporcional ao seu peso na estrutura do rendimento. Dado o maior peso dos rendimentos do trabalho por conta de outrém na estrutura dos rendimentos do Painel, não se nos afigura estranho que esse peso acrescido se traduza igualmente num maior nível de desigualdade.

A comparação entre a distribuição do rendimento monetário com o rendimento total, permite evidenciar que, no caso português, o conjunto dos diferentes rendimentos não monetários têm um efeito equalizador sobre a distribuição do rendimento e o nível de desigualdade, sendo a sua importância particularmente relevante para os primeiros decis da distribuição, como se pode observar nas duas últimas colunas do Quadro 7.4.

A consideração do rendimento não monetário tem igualmente importantes repercussões na determinação da taxa de pobreza. Se considerarmos o conjunto de todos os rendimentos dos agregados, a taxa de pobreza reportada pelo IOF é de 18%, cerca de 6 pontos percentuais abaixo da alcançada utilizando a distribuição do rendimento monetário do Painel. Ilustra-se assim, uma vez mais, a importância que em Portugal os rendimentos não monetários assumem no rendimento total e nas condições de vida das famílias e, em particular, nas de mais baixo rendimento.

7.3   Principais Resultados e Linhas de Investigação Futura

Este trabalho permite evidenciar, em primeiro lugar, que a distribuição do rendimento em Portugal apresenta em 1994 uma elevada assimetria, caracterizada por altos índices de desigualdade e associada a situações de precariedade e de pobreza monetária muito significativas. Estes resultados revelam-se suficientemente robustos, não estando dependentes da fonte de informação estatística utilizada. Quer o painel dos Agregados Familiares quer o Inquérito aos Orçamentos Familiares reportam níveis de desigualdade e de pobreza muito superiores aos registados na generalidade dos países da U.E.

Um segundo aspecto a ter em consideração prende-se com a utilização do Painel dos Agregados Familiares na análise da distribuição do rendimento e das condições de vida das famílias. Constituindo o Painel o mais importante repositório de informação sobre as famílias e os indivíduos em Portugal, este estudo corporiza uma primeira tentativa de modelização dos seus dados micro-económicos na análise da repartição do rendimento e na identificação das famílias em situação de pobreza. O teste de consistência dos resultados obtidos, comparativamente aos resultantes da utilização do IOF, não só confirma as potencialidades da utilização do Painel como instrumento privilegiado para o estudo das condições de vida das famílias como evidencia que o Painel pode constituir um quadro de referência para a harmonização e o aperfeiçoamento do sistema de estatísticas sobre as famílias.

Uma última observação respeita às possibilidades de utilização futura da informação do Painel. Embora este primeiro estudo se tenha restringido a uma análise seccional dos dados do Painel é na possibilidade de realização de estudos longitudinais que a sua utilização apresenta claras vantagens comparativas face a outras fontes de informação mais tradicionais. A disponibilidade, num futuro próximo, da utilização de sucessivas vagas do Painel potenciará a realização de estudos vocacionados para a identificação das diferentes dinâmicas sociais, para o traçar de perfis evolutivos das principais variáveis referentes às condições de trabalho e de vida das famílias , para o acompanhamento e avaliação das políticas sociais.

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[15]   Veja-se Rodrigues,C.F. (1994)

8. DINÂMICA DA POBREZA

A característica longitudinal do Painel permite acompanhar o movimento dos agregados e indivíduos em múltiplas vertentes de análise.

Tomando por base as duas vagas do PAUE (94, 95), conduziu-se uma análise dinâmica em duas vertentes: a *mobilidade dos indivíduos*, por referência à distribuição do rendimento e as *transferências* operada entre as sub-populações pobre e não pobre. Dever-se-á ter em atenção que análise apenas tem em conta dois anos consecutivos.

8.1 Mobilidade entre Quintis[16]

A análise desta mobilidade para o conjunto dos 12 países[17] revela que, entre as duas vagas, a percentagem dos indivíduos que tem um agravamento da sua situação é superior à dos indivíduos que revelam um progresso no seu posicionamento face à distribuição do rendimento. Este movimento é muito mais acentuado para a Irlanda, França, Alemanha, Itália e Portugal. A Holanda, Reino Unido e Espanha apresentam uma tendência contrária – a progressão na escala de rendimentos excede os movimentos regressivos.

QUADRO 8.1

MOBILIDADE ENTRE QUINTIS

	Melhorou	Manteve	Piorou	Total
Alemanha	18,9	58,3	22,9	100,0
Dinamarca	21,7	53,9	24,4	100,0
Holanda	19,6	62,3	18,1	100,0
Bélgica	22,8	53,9	23,3	100,0
Luxemburgo	16,8	65,3	17,9	100,0
França	17,6	58,8	23,6	100,0
Reino Unido	23,7	54,1	22,2	100,0
Irlanda	16,8	57,7	25,5	100,0
Itália	22,2	54,8	23,1	100,0
Grécia	22,7	51,3	26,0	100,0
Espanha	21,4	57,6	21,0	100,0
Portugal	18,0	60,8	21,1	100,0
Total UE12	20,5	56,9	22,6	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995

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[16] Consultar conceitos e definições no fim do artigo.

[17] A Áustria não é considerada nesta análise dado que apenas iniciou a sua participação no PAEU na segunda vaga

QUADRO 8.2A
MOBILIDADE ENTRE QUINTIS UE12

		PAUE 95					
		1	2	3	4	5	Total
	1	63,9	18,6	7,9	3,6	2,3	20,0
	2	22,9	50,8	17,8	6,9	2,6	20,0
PAUE 94	3	7,7	22,3	47,1	19,0	6,0	20,0
	4	3,5	6,0	22,8	50,9	17,4	20,0
	5	2,0	2,4	4,4	19,6	71,8	20,0
	Total	100,0	100,0	100,0	100,0	100,0	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995

QUADRO 8.2B
MOBILIDADE ENTRE QUINTIS PORTUGAL

		PAUE 95					
		1	2	3	4	5	Total
	1	70,3	17,4	6,5	2,8	1,4	20,0
	2	19,8	52,5	17,3	6,6	2,5	20,0
PAUE 94	3	6,1	22,9	48,4	18,3	5,6	20,0
	4	3,1	4,8	23,1	55,5	12,3	20,0
	5	0,7	2,3	4,7	16,8	78,3	20,0
	Total	100,0	100,0	100,0	100,0	100,0	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995

8.2   Movimentos pobreza/não pobreza

A análise dos movimentos de entradas e saídas dos indivíduos para uma situação de pobreza constitui um caso particular da análise da mobilidade entre quintis.

Calculadas as linhas de pobreza para 1993 e 1994, os indivíduos são classificados por referência ao limiar de pobreza em cada um dos anos, o que permite quantificar o movimento de saída ou entrada para uma situação de pobreza.

Do Quadro 8.3, verifica-se que de 1993 para 1994 se registou um decréscimo da taxa de pobreza em 0.5 p. p. para o conjunto dos 12 países; **a Irlanda, Dinamarca, Bélgica e Portugal apresentam uma tendência contrária.** Esta situação pode, em parte, estar associada ao movimento ocorrido no limiar de pobreza que apresenta para estes países à excepção da Bélgica, taxas de crescimento relativamente fortes. Entre os países que acompanham a tendência de queda na taxa de pobreza, destacam-se as maiores reduções da Grécia (-2,1 p. p.), Itália (-1,4 p. p.) e Luxemburgo (-1,3 p. p.). Salienta-se, na Grécia, a redução da taxa de pobreza apesar do crescimento acentuado do limiar de pobreza (5,7%) entre as duas vagas.

QUADRO 8.3
LINHAS DE POBREZA E TAXAS DE POBREZA

	1993		1994	
	L. Pobreza	**Tx. Pobreza**	**L. Pobreza**	**Tx. Pobreza**
Alemanha	6,96	17,3	7,44	17,6
Dinamarca	7,3	9,1	7,76	10,7
Holanda	6,58	10,7	6,57	10,0
Bélgica	7,43	17,4	7,55	18,0
Luxemburgo	11,3	15,6	11,25	14,3
França	6,4	16,3	6,98	15,8
Reino Unido	6,44	21,3	6,73	20,5
Irlanda	4,79	19,7	5,44	21,4
Itália	5,02	20,1	5,21	18,7
Grécia	4,04	22,8	4,27	20,7
Espanha	4,53	19,8	4,51	18,8
Portugal	3,57	23,4	3,78	23,8
Total		18,5		18,0

Fonte: Eurostat, PAUE, segunda vaga,1995

Conclui-se igualmente que Portugal apresenta nos movimentos de saída de situação de pobreza, um perfil similar à média comunitária. Cerca de 8% dos não pobres em 94 vêm de uma situação de pobreza no ano anterior (Quadro 8.4).

QUADRO 8.4
MOVIMENTOS POBREZA/NÃO POBREZA

		PAUE 95			
		UE12		**Portugal**	
		Não Pobre	**Pobre**	**Não Pobre**	**Pobre**
PAUE 94	Não Pobre	92,2	36,3	92,0	27,4
	Pobre	7,8	63,7	8,0	72,6
	Total	100,0	100,0	100,0	100,0

Fonte: Eurostat, PAUE, segunda vaga,1995

9. ANEXO TÉCNICO

9.1 Conceitos e notas explicativas:

O Painel de Agregados Domésticos Privados da União Europeia (PAUE) é um inquérito multidimensional aos agregados, que cobre vários aspectos: rendimento, saúde, educação, alojamento, migração, características demográficas e do emprego, etc. Fundamentando-se num questionário harmonizado, o PAUE fornece uma microbase de dados comparável, centralizada no Eurostat, que pode ser usada de forma flexível para esclarecer alguns aspectos das políticas. Dado que o PAUE é um painel, ou seja, uma tentativa de entrevistar os mesmos agregados todos os anos, irá, a seu tempo, fornecer informação sobre a dinâmica social. Para uma descrição pormenorizada da metodologia do PAUE, ver *"The European Community Household Panel (ECHP): Volume 1 - Survey methodology and implementation", Tema 3, Série E, Publicação do Eurostat, 1996.*

Decil

O principal método de análise da distribuição do rendimento consiste em ordenar as unidades (agregados, indivíduos, etc.) por uma determinada medida de rendimento e, de seguida, dividir as unidades assim ordenadas em grupos de igual dimensão. Os grupos que contêm 10% de unidades denominam-se "decis". Assim, o "decil de base" é constituído pelos 10% de unidades com os rendimentos mais baixos.

Escalas de equivalência

O objectivo das escalas de equivalência é ajustar os rendimentos à dimensão e composição variáveis dos agregados. É evidente que um agregado de 2 pessoas com 10.000 ecus não pode, regra geral, ser considerado como tendo o mesmo nível de vida que um agregado de 5 pessoas com o mesmo rendimento. Dividir o rendimento pelo número de pessoas do agregado seria partir do princípio de que uma criança tem os mesmos custos que um adulto e/ou que 2 adultos vivendo juntos têm o dobro dos custos de um adulto que viva sozinho. A escala de equivalência utilizada na presente nota é a escala da OCDE modificada, ou seja, 1,0 para o primeiro adulto, 0,5 para cada um dos outros adultos do agregado e 0,3 para cada criança de idade inferior a 14 anos. Estas modificações basearam-se no trabalho de investigação encomendado pelo Eurostat, *"Poverty statistics in the late 1980s - Research based on micro data"*, especialmente em análises de sensibilidade de uma variedade de escalas e no seu impacto sobre as taxas e composição da pobreza.

O rendimento monetário líquido equivalizado obtém-se dividindo o rendimento monetário líquido total do agregado pelo número de "equivalentes-adulto". Assim, um agregado com 2.100 ecus por mês e que inclua 2 adultos e 2 crianças terá um rendimento de 1.000 ecus por adulto equivalizado ou, dito de outro modo, um rendimento equivalizado de 1.000 ecus.

Paridade do Poder Aquisitivo (PPA)

Os rendimentos pecuniários em moedas nacionais não podem ser comparados entre países. A conversão poderia ser feita usando taxas de câmbio estrangeiras, mas as taxas são afectadas por muitos factores, não reflectindo, por esse motivo, o poder de compra relativo entre países. Estão a ser levados a cabo estudos, nos vários países, para estabelecer o custo de um determinado cabaz de bens e serviços (o mesmo, na medida do possível, para todos os países). Esses estudos originam PPA, que convertem cada unidade monetária nacional numa moeda de referência comum, da qual cada unidade pode comprar a mesma quantidade de bens e serviços, em todos os países, num determinado ano.

Medidas de pobreza

As medidas Foster-Greer-Thorbecke FGT, são dadas pela expressão:

$$P_\alpha = \sum_{i=1}^{q} (1 - y_i / z)^\alpha / n$$

em que Z representa a linha de pobreza, Y_i o rendimento da unidade de observação i, n o número de unidades na população total e q o número de pobres.

Da expressão anterior podem derivar-se três medidas de pobreza de acordo com o valor atribuído a α, isto é:

i. **Taxa de Pobreza**: Com $\alpha=0$ a expressão $P\alpha$ corresponde a p/q , isto é, à proporção do número de pobres na população total, designada por taxa de pobreza.

ii. Severidade da pobreza: Para $\alpha=1$ a expressão corresponde ao total das "distâncias" em percentagem da linha de pobreza entre o rendimento de cada um dos indivíduos pobres e o

limiar de pobreza. Este indicador assume valores mais elevados quando, em termos individuais, as distâncias ao limiar de pobreza (fosso de pobreza) são mais acentuadas.

iii.   Intensidade da pobreza: Este outro indicador obtém-se da expressão geral com α=2. Isto corresponde a atribuir um peso mais acentuado para maiores distâncias à linha de pobreza.

Medidas de desigualdade

Na metodologia seguida para analisar a desigualdade foram utilizadas as seguintes medidas:

i.   **Decil Ratio (P_{90}/P_{10}):** Esta medida relaciona o rendimento acima do qual se encontram os 10% de indivíduos mais ricos com o rendimento abaixo do qual se situam os 10% de indivíduos mais pobres.

ii.   **Share Ratio (S_{80}/S_{20}):** Corresponde à relação entre a parcela do rendimento total distribuída aos 20% de indivíduos mais ricos e a parcela distribuída aos 20% de indivíduos mais pobres.

iii.   **Índice de Gini (G):** O índice ou coeficiente de Gini é uma medida sintética da desigualdade, variando entre 0 (equidistribuição) e 1 (máxima desigualdade). Este indicador é mais sensível às transferências afectando indivíduos situados no centro da distribuição (Rodrigues,1999). Representando por Y_i o rendimento atribuído a cada indivíduo e considerando a população com uma ordenação crescente por referência ao atributo rendimento este índice define-se como:

$$G = 1 + \left(\frac{1}{n}\right) - \left(\frac{2}{\left(n^2\mu\right)}\right)\sum_{i=1}^{n}(n-i+1)Y_i$$

em que μ corresponde ao rendimento médio da distribuição para a população n.

iv.   **Índice de Atkinson (A):** o índice de Atkinson cuja sensibilidade a diferentes zonas da distribuição pode variar de acordo com o valor do parâmetro ε, entendido como um parâmetro de aversão à desigualdade. Quanto maior o valor atribuído a este parâmetro maior é a ponderação ou peso associado aos rendimentos mais baixos. O índice de Atkinson define-se

$$\text{como: } A = 1 - \left(\frac{1}{\mu}\right)\left[\left(\frac{1}{n}\right)\sum_{i=1}^{n}\left(y_i^{1-\varepsilon}\right)\right]^{\frac{1}{1-\varepsilon}}$$

v.   **Mobilidade entre Quintis:** tomando por referência a posição de cada indivíduo face à distribuição do rendimento nas duas vagas, procedeu-se à construção de uma matriz em que o elemento genérico P_{ij}, representa o número de indivíduos que, na primeira vaga se classificavam no i-ésimo Quintil da distribuição, e na segunda vaga no j-ésimo Quintil. Para i=j, existe manutenção da situação [18]; se i≠j verifica-se mobilidade que se pode traduzir em deterioração ou melhoria da situação anterior.

---

[18]   Não considerando os movimentos intra Quintis.

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LIMIARES DE POBREZA

Linhas de pobreza	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
P_LINE40	4,96	5,17	4,38	5,03	7,50	4,66	4,49	3,62	3,47	2,85	3,01	2,52	4,94
P_LINE50	6,20	6,47	5,48	6,29	9,38	5,82	5,61	4,53	4,34	3,56	3,76	3,15	6,17
P_LINE60	7,44	7,76	6,57	7,55	11,25	6,98	6,73	5,44	5,21	4,27	4,51	3,78	7,40
P_LINE70	8,69	9,05	7,67	8,81	13,13	8,15	7,85	6,34	6,08	4,98	5,27	4,41	8,64
Mediana	12,41	12,93	10,96	12,58	18,75	11,64	11,21	9,06	8,68	7,11	7,52	6,31	12,34

MEDIDAS DE POBREZA

	Alemanha	Dinamarca	Holanda	Bélgica	Luxemburgo	França	Reino Unido	Irlanda	Itália	Grécia	Espanha	Portugal	Áustria
F0POV40	0,0781	0,0240	0,0420	0,0624	0,0468	0,0455	0,0596	0,0447	0,0752	0,0966	0,0660	0,0941	0,0704
F1POV40	0,0272	0,0061	0,0164	0,0230	0,0169	0,0136	0,0161	0,0141	0,0312	0,0320	0,0209	0,0359	0,0234
F2POV40	0,0130	0,0026	0,0092	0,0119	0,0090	0,0069	0,0075	0,0070	0,0189	0,0146	0,0107	0,0201	0,0112
F0POV50	0,1121	0,0539	0,0643	0,1171	0,0875	0,0917	0,1268	0,1116	0,1130	0,1427	0,1101	0,1667	0,1100
F1POV50	0,0405	0,0123	0,0238	0,0358	0,0264	0,0237	0,0307	0,0253	0,0433	0,0497	0,0337	0,0550	0,0365
F2POV50	0,0205	0,0049	0,0131	0,0181	0,0135	0,0110	0,0131	0,0114	0,0255	0,0241	0,0166	0,0291	0,0180
F0POV60	0,1761	0,1070	0,1003	0,1795	0,1427	0,1584	0,2048	0,2140	0,1874	0,2067	0,1886	0,2389	0,1701
F1POV60	0,0572	0,0233	0,0331	0,0545	0,0408	0,0403	0,0529	0,0487	0,0612	0,0705	0,0527	0,0792	0,0537
F2POV60	0,0291	0,0088	0,0177	0,0263	0,0195	0,0174	0,0218	0,0190	0,0336	0,0351	0,0246	0,0407	0,0262
F0POV70	0,2352	0,1724	0,1858	0,2621	0,2269	0,2396	0,2895	0,3050	0,2683	0,2774	0,2643	0,2998	0,2496
F1POV70	0,0783	0,0398	0,0482	0,0786	0,0614	0,0631	0,0805	0,0788	0,0846	0,0952	0,0773	0,1069	0,0761
F2POV70	0,0394	0,0147	0,0237	0,0370	0,0279	0,0264	0,0337	0,0309	0,0440	0,0478	0,0353	0,0547	0,0364

Fonte: EUROSTAT, PAUE, segunda vaga,1995

SESSION 5:

THE FUTURE AGENDA FOR THE RIO GROUP - DISCUSSION

Refer to the Preliminary Report (ECLAC) on page 1 of this document.

SESSION 6:

POVERTY AND SOCIAL EXCLUSION SURVEY OF BRITAIN

Absolute and Overall Poverty

PETER TOWNSEND
UNIVERSITY OF BRISTOL
UNITED KINGDOM

CONTENTS

After the World Summit on Social Development in Copenhagen in 1995, 117 countries adopted a declaration and programme of action which included commitments to eradicate "absolute" and reduce "overall" poverty, drawing up national poverty-alleviation plans as a priority (UN, 1995).

Absolute poverty was defined by the UN as "a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services". (UN, 1995, p. 57).

Overall poverty was considered to takes various forms, including "lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition; ill health; limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; unsafe environments and social discrimination and exclusion. It is also characterised by lack of participation in decision-making and in civil, social and cultural life. It occurs in all countries: as mass poverty in many developing countries, pockets of poverty amid wealth in developed countries, loss of livelihoods as a result of economic recession, sudden poverty as a result of disaster or conflict, the poverty of low-wage workers, and the utter destitution of people who fall outside family support systems, social institutions and safety nets". (UN, ibid, p. 57).

ABSOLUTE POVERTY

Absolute poverty means being so poor that you are deprived of basis human needs.

In order to **avoid** ABSOLUTE poverty, you need enough money to cover all these things:

Adequate diet;

Housing costs/rent;

Heating costs;

Clothing;

Adequate sanitation facilities (sewage rates and water rates);

Access to basic health care;

Access to education/schooling.

Q.21 How many pounds a week, after tax, do you think are necessary to keep a household such as the one you live in, out of ABSOLUTE poverty?

Nearest £.

Q.22 How far above or below that level would you say your household is?

A lot above that level of income

A little above

About the same

A little below

A lot below that level of income

Don't know

OVERALL POVERTY

> In order to **avoid** OVERALL poverty, you need to have enough money not only to cover all things mentioned in the ABSOLUTE poverty list above, but enough money to ensure that you are able to:
>
> Live in a safe environment;
>
> Have a social life in your local area;
>
> Feel part of the local community;
>
> Carry out your duties/activities in the family and neighbourhood, and at work;
>
> Meet essential costs of transport.
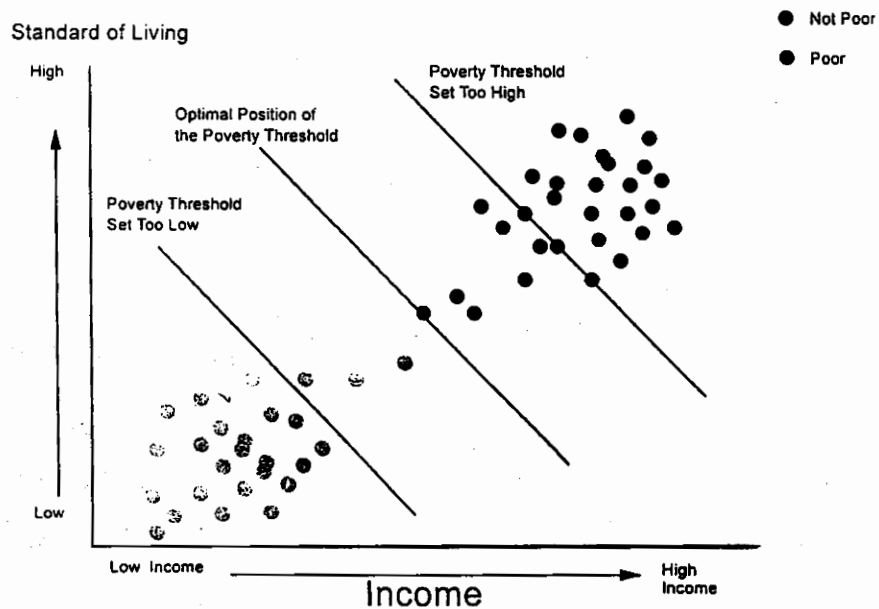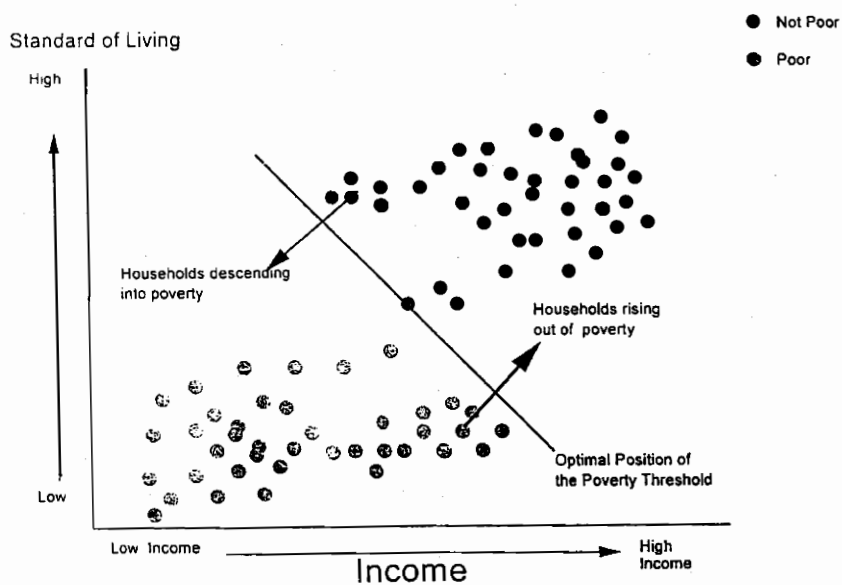
Figure 2.7: Scatterplot of SMR for deaths under 65 and percent of households living in poverty (Breadline Britain index), for parliamentary constituencies, Britain, 1991-95
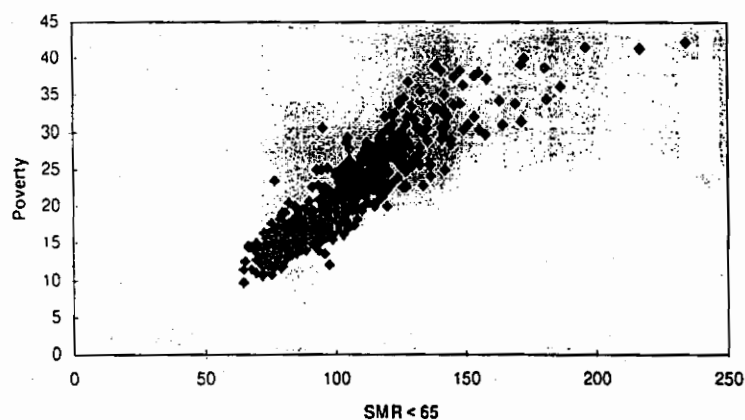
Source: Analysis by authors

SOCIALLY EXCLUDED GROUPS?

The long term or recurrently unemployed:

Those employed in precarious and unskilled jobs, especially older workers or those unprotected by labour regulations;

The low paid and the poor;

The landless;

The unskilled, the illiterate and school drop-outs;

The mentally and physically handicapped and disabled;

Addicts;

Delinquents, prison inmates and persons with criminal records;

Single parents;

Battered or sexually abused children, those who grew up in problem households;

Young people, those lacking work experience or qualifications;

Child workers;

Women;

Foreigners, refugees, immigrants;

Racial, religious and ethnic minorities;

The disenfranchised;

Beneficiaries of social assistance;

Those in need but ineligible for social assistance;

Residents of rundown housing, disreputable neighbourhoods;

Those with consumption levels below subsistence (the hungry, the homeless, the Fourth Wold);

Those whose consumption, leisure or other practices (drug or alcohol abuse, delinquency, dress, speech, mannerism) are Stigmatised or labelled as deviant;

The downwardly mobile;

The socially isolated with friends or family.

Source: Studies on specific social categories in the research literature on social exclusion compiled by Silver (1994:548-9).

GENERAL HOUSEHOLD SURVEY 1998 / 99

Variables include:

Employment (34 questions)

Pensions (13 questions)

Education (19 questions)

Childrens' Daycare (23 questions)

Adults' Health (56 questions)

Childrens' Health (30 questions)

The Elderly (137 questions)

Smoking (21 questions)

Drinking (45 questions)

Family Information (73 questions)

Contraception (30 questions)

Income (61 questions)

Household Information (82 questions) (this includes tenure, accomodation type, consumer durables, household structure, etc).

THE SURVEY

1. ONS will ask the socially perceived necessities questions in their June their Omnibus. This will obtain nationally representative responses from a sample 1.800 adults.

2. The main survey will be carried out as follow up interviews with a sifted sub-sample of 1.800 General Household Survey respondents.

THE SAMPLE SELECTION CRITERIA

The sample for the main survey is to be drawn from respondents to the 1998/1999 General Household Survey. Because we will know many of the characteristics of those respondents when the sample is drawn we are able to stratify selection in order to over sample those respondents that we are particularly interested in.

We have decided to over sample on the basis of quinties of equivalent net disposable income as follows:

Top quintile 10 per cent

Second quintile 10 per cent

Third quintile 10 per cent

Fourth quintile 30 per cent

Bottom quintile 40 per cent

One randomly selected person per household will be interviewed.

We have decided to use an equivalence scale which is based on budget standards research rather than the McClements scale which is the norm in analysis of British government surveys or the scales used by OECD or Eurostat. The case for this is that we are convinced that those scales grossly underestimate the relative needs of children, especially young chindren, disabled people and lone parent families.

Income and
Standard of
Living
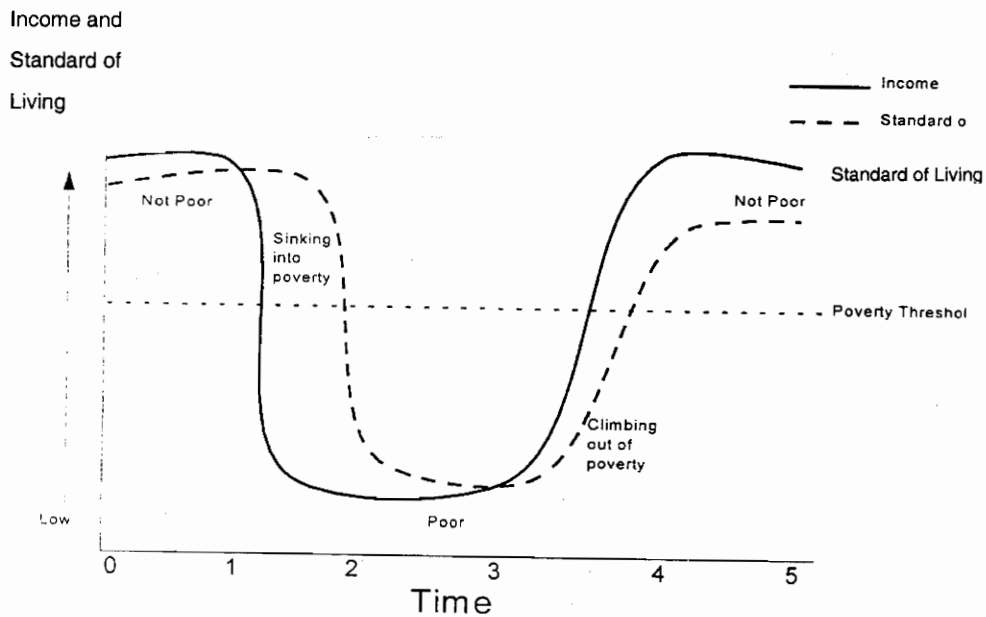
SECTIONS OF THE JOSEPH ROWNTREE FOUNDATION
MILLENNIUM POVERTY AND SOCIAL EXCLUSION SURVEY

• ABSOLUTE AND OVERALL POVERTY

• NECESSITIES

• INTRA - HOUSEHOLD POVERTY

• SOCIAL NETWORKD AND SUPPORT

• PERCEPTION OF POVERTY

• LOCAL SERVICES

• FINANCE AND DEBTS

• POVERTY AND TIME

• HEALTH

• HOUSING

• CRIME

• CHILDREN'S EDUCATION

• ACTIVISM

Two meals a day

Meat or fish or vegetarian equivalent every other day

Heating to warm living areas of the home if it's

A dressing gown

Two pairs of all weather shoes

New, not second hand, clothes

A television

A roast joint or its vegetarian equivalent once a week

Carpets in living rooms and bedrooms in the home

Telephone

Refrigerator

Beds and bedding for everyone in the household

Damp-free home

A car

A dictionary

Presents for friends or family once a year

A warm waterproof coat

A washing machine

A dishwasher

Regular savings (of £ 10 a month) for 'rainy days' or retirement

A video

Enough money to keep your home in a decent state of decoration

Insurance of contents of dwelling

Fresh fruit and vegetables every day

A home computer

An outfit to wear for social or family occasions such as parties and weddings

Microwave oven

Mobile phone

Tumble dryer

Deep freezer/fridge freezer

Satellite TV

CD player

Replace any worn out furniture

Replace or repair broken electrical goods such as refrigerator or washing machine

Appropriate clothes to wear for job interviews

All medicines prescribed by your doctor

Access to the internet

A small amount of money to spend each week on yourself, not on your family

Having a daily newspaper

A night out once a fortnight

A hobby or leisure activity

A holiday away from home for one week a year, not with relatives

Celebrations on special occasions such as Christmas

A meal in a restaurant/pub once a month

Holidays abroad once a year

Coach/train fares to visit family/friends in other parts of the country four times a years

Friends or family round for a visit, for a meal/snack/drink

Visits to friends or family

Going to the pub once a fortnight

Attending weddings, funerals and other occasions

Attending church/mosque/synagogue or other places of worship

Collect children from school

Visits to school, for example, sports day, parents evening

TABLE 9

NUMBER AND PERCENTAGE OF THE POPULATION LIVING ON INCOMES BELOW HALF OF THE AVERAGE IN 1994 IN SIXTEEN EUROPEAN COUNTRIES

Country	Number of People Below 50% of Average Income	Percentage of the Population Below 50% of Average Income
United Kingdom	13,449,000	23%
Germany	12,201,000	15%
Italy	9,714,000	17%
Spain	8,226,000	21%
France	8,124,000	14%
Portugal	2,379,000	24%
Greece	2,193,000	21%
Belgium	1,621,000	16%
Netherlands	1,234,000	8%
Austria	1,206,000	15%
Ireland	894,000	25%
Sweden	485,000	6%
Denmark	313,000	6%
Finland	235,000	5%
Norway	217,000	5%
Luxembourg	61,000	15%

Note: calculated from ECHIP and Nordic SLC data in Vogel (1997), Eurostat (1998) & Council of Europe (1995).

THE JOSEPH ROWNTREE FOUNDATION MILLENNIUM POVERTY AND SOCIAL EXCLUSION SURVEY

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Olwen Rowlands – Manager of the Omnibus Survey

Figure 4: Percentage of the Population with Below Half Average Incomes
After Housing Costs (1961- 1995)

Source: HBAI volumes and Goodman and Webb (1995)[22]
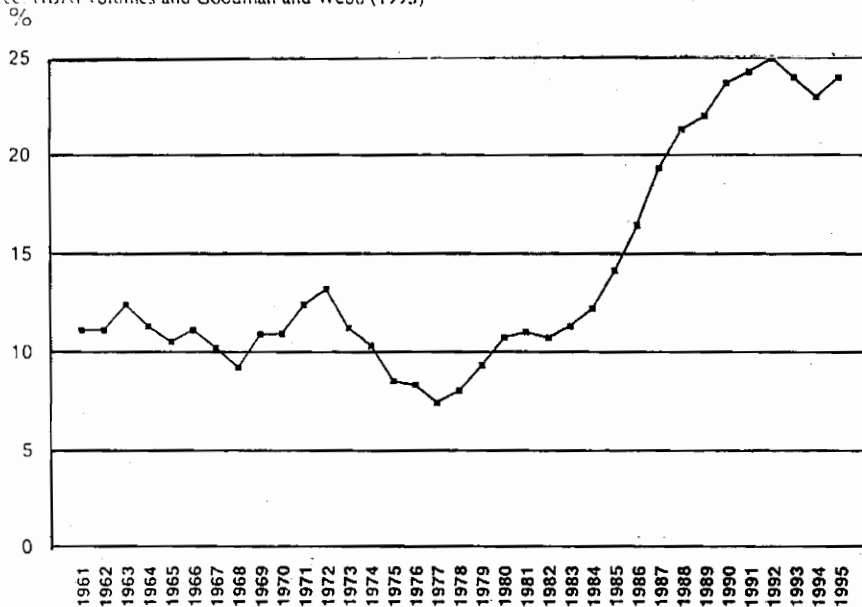
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